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PRELIMINARY COMMITTEE REPORTS

OF THE

WHITE HOUSE CONFERENCE

ON

CHILD HEALTH AND PROTECTION

WHITE HOUSE CONFERENCE
on
CHILD HEALTH *and* PROTECTION

Preliminary Committee Reports

Confidential—not for publication

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FOREWORD

THIS volume, strictly confidential in content and not to be released for publication, is submitted to you in advance of the White House Conference on Child Health and Protection.

It is the summation of the results of the year of research and deliberation on the part of the many committees which compose the four sections of the Conference. Preliminary in character, the material herein made available has been assembled and published prior to the convening of the Conference so that those who participate in it may have opportunity to familiarize themselves with and study the groundwork of the subjects which will form the basis of the discussion.

These reports are a cross-section of the expert thought and endeavor concerning the welfare of children in this country, and the assembling at the Conference of this expert opinion and inquiry should stimulate every effort to give to children their fullest measure of opportunity and development. The extent and power of that impetus will depend, on the one hand, upon the clarity of mind with which the participants in the Conference sort and digest the material brought together, and the effectiveness with which they interpret it into practice throughout the country; while on the other hand, it will depend upon the responsiveness and cooperation on the part of those who are the daily practitioners in the lives of the children—the mother, father, teacher, nurse, and all those who touch the everyday life of the child.

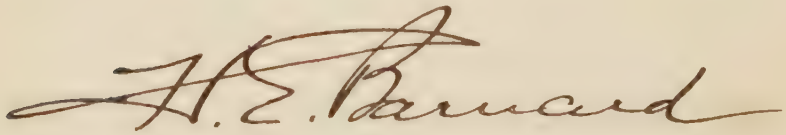
This is not the place to restate the purpose of the Conference. Appointed for cooperative public service at the call of the President of the United States, its members have been assigned their tasks with two main objectives before them: First, to study the children of the Nation and the varied forces influencing them; second, from the findings of the investigation, to recommend the wisest possible course for their future direction.

For convenience of the members, and to assure a more intelligible approach to the discussion of the great problems revealed in the survey, committee chairmen upon request have summarized within a narrow compass their full reports. Preliminary in form,

and in some instances representing incomplete investigations, the volume must be read with this fact in mind. Where these summaries may appear general rather than specific, or abstract rather than concrete, it may be assumed without further comment that the full reports will be detailed and supported by concrete evidence upon which the summary conclusions are based.

In editing the reports, the editor has confined himself largely to certain outstanding matters. Upon him has fallen the responsibility of procuring, assembling, and guiding the reports through the press. Since it was assumed at the outset, and properly so, that each preliminary report represents very precise conclusions reached by experts whose judgments are presumed to be correct, the editor was left no alternative but to restrict himself to making changes in form rather than in substance. However, because of the late arrival of the reports and the many minds represented in their compilation, a lack of time prevented the establishment of certain desirable uniformities in style.

We approach the Conference with the conviction that there is a large public hungry for just the kind of concrete facts and guidance which this Conference offers. However solicitous the attitude of the public may be, it will need intelligent stimulation and guidance. You are interpreters and leaders in the activities that should logically follow the Conference. This volume of summaries is sent to you in recognition of that leadership and in the assured belief that you will not fail the great trust which is laid in your hands.



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SECTION I

MEDICAL SERVICE

INTRODUCTION

The Committees of the Section are:

1. Growth and Development
2. Prenatal and Maternal Care
3. Medical Care for Children

The committee dealing with the subject of the growth and development of children stands in a somewhat unique position. Its primary function in the preparation of its report is to gather and evaluate the knowledge which is fundamental to the problems of more practical character attacked by the other committees. Its position is shared to some extent by other committees of the Conference. Practical recommendations will be made by the committee where they may be directly based upon proved and accepted scientific facts. But primarily it has undertaken to examine, as far as is possible within the scope of such a report, the foundation of our knowledge concerning the growth and development of children from conception to maturity.

The Committee on Prenatal and Maternal Care, as the title indicates, has to do with the beginning of child life. This fact stresses its extreme importance, and indicates the necessity for the comprehensive studies which the committee is making in order that the methods employed in the safeguarding of the life of the child from conception may be perfected.

The Committee on Medical Care for Children treats of the child from birth through adolescence. This represents a very comprehensive and important span of life, one during which morbidity and mortality are exceedingly high, and for which much remains to be done in the fields of prevention and protection.

A. COMMITTEE ON GROWTH AND DEVELOPMENT

Method of Attack and Division of Subject

For the purposes of this survey the subject of the growth and development of children was divided into six main divisions. Each of these is treated in a series of chapters written by various committee members, each an authority in his field. The report is much more than a mere collection of individual contributions, since the work of each division was planned in meetings of all the members dealing with each of the main divisions, and the individual papers have been submitted to other members for criticism. As far as possible, they represent the consensus of expert opinion. An effort has been made throughout to set forth the definite knowledge on each subject, based on well-established evidence. This is amplified by such generally accepted interpretations as we may base upon evidence still incomplete, and we have particularly endeavored to point out the gaps in our knowledge and the directions which further research may most profitably take.

Our knowledge of growth and development has been derived by various methods and from various sources. These include observations made upon large numbers of children in health and in disease. Much valuable information has been obtained from the clinic and much also from the laboratory. In the laboratory, animal experimentation has proved to be an indispensable tool. Without it we should today be ignorant of the whole subject of vitamins and of many other important phases of nutrition. Our knowledge of the sciences of physiology, bacteriology, and immunology would be only rudimentary without it. Inquiry into the fundamental processes of growth, which take place so slowly in the human as almost to escape detection except over periods of months, may be attempted with prospect of success only in rapidly growing animals. The theoretical limitations imposed by differences between species are slight as compared with the tremendous advantages and opportunities offered by animal experimentation in the attack on otherwise inaccessible problems.

In this summary we cannot attempt to review all of the facts which the full report will present in detail. We shall merely offer the leading conclusions in regard to certain topics which seem of special significance from the point of view of the conference as a whole, and emphasize certain trends and points of view which seem likely to dominate our thought in the future.

The first of our six divisions includes various topics of general interest and bearing, such as heredity, human types, the significance of different age levels, fatigue, climate, immunity to disease, and so on.

The second division deals with morphological and functional considerations, tracing the growth and development of individual organ systems of the body, such as the skeletal, the muscular and nervous systems, the senses of sight and hearing, the teeth, the circulatory system, the digestive system, the respiratory system, and so on, including a consideration of body mechanics and posture. Depending on the state of knowledge concerning the various topics and on the judgment of the individual writers, subjects have been handled in a variety of ways, but in each case the normal development of the organs and the effect upon them of the commoner pathological conditions have been considered.

Nutrition constitutes the third division of our subject. After a discussion of certain general considerations, we take up the various recognized food constituents one by one: proteins, carbohydrates, fats, vitamins, minerals, and water. Our knowledge concerning the biochemistry of these substances is summarized, and likewise various practical considerations concerning their significance in the diet of children and their importance for growth. The diet as a whole is considered in terms of energy requirements and also the question of how these energy requirements change as the child grows older. The principles upon which a rational and satisfactory diet may be constructed are then outlined in practical terms, although here, as elsewhere, we do not attempt to set up standards with finality, but merely to indicate the principles which, in the light of our present knowledge, must underlie such standards. In fact, in view of the rapid advance of knowledge in many fields, there is often a positive danger in attempting prematurely to set up final quantitative standards.

The fourth division of the report deals with the subject of mental development. The development of intelligence and its measurement by various types of tests are considered at some length, and likewise the development of motor skills and language. The part played by emotion and by habit in determining the behavior of children is reviewed, and the importance of sound training and good habits and their dependence upon the development of a proper point of view by the parents is pointed out. Several other topics are also considered, such as the relationship between

socio-economic conditions and mental development, personality, the relation of physical growth to mental growth, and so forth.

The fifth division considers at some length the practical question of the appraisal of the individual child from the point of view of his physical status. The standards by which physical status is to be judged, such as height and weight in relation to age, are considered critically, as well as various other measurements which may be of value, although not acceptable as standards. Methods of examination of the child, as they might be carried out by a health officer or in a physician's office, are considered with special reference to particular findings of significance at different ages.

In the final division the relation of disease to the processes of growth and development is discussed both from the point of view of modifications which may be produced by disease, and the differences in the manifestations of disease which depend upon the stage of growth and development which has been attained by the individual.

HEREDITY

The principles of heredity are now fairly well understood, thanks to intensive work on the breeding of animals and plants. The application of these principles to the human race is made rather difficult by the complexity of the human make-up and by the extensive cross-breeding of racial stocks which now exists. Without controlled breeding it is very difficult to analyze hereditary characteristics and to evaluate their significance, although there is no doubt that the fundamental principles of Mendelian heredity hold in the case of humans as in other animal forms. From the practical point of view it is important to recognize that heredity, although of great significance in determining the make-up of the adult individual, is by no means omnipotent. The individual is the product of an interplay between his hereditary endowment and his environment. This interplay is continuous throughout his growth, and a favorable environment and good training definitely affect the final achievement. Heredity does determine very definitely the potentialities of an individual in various directions both physical and mental, but other factors more completely under our control may determine whether or not his potentialities are fully achieved.

HUMAN TYPES

The subdivision of the human race into various types on the basis of characteristics such as stature, muscular development, body proportions, and so on, has been suggested by various workers with the implication that with each body type may be associated other characteristics such as physiological fitness in some respect, mental traits, or susceptibility to various diseases. In spite of suggestive findings in various directions, such as the association of longevity with a particular type of scapula, the divisions so far proposed do not seem to be very satisfactory. The contrasting types merge imperceptibly into one another and the association of characteristics is not at all constant.

Much of the work in this field has been impeded by premature speculation, and we are in need of further exact data on these matters. As an aid to clear thinking we suggest the avoidance as far as possible of the term "type." It is more precise to describe an individual simply by adjectives expressing his characteristics and by giving quantitative measurements where possible than to say that he belongs to a "muscular type" or an "asthenic type."

FATIGUE

The bearing of fatigue upon the growth and development of children is universally recognized as a very important one, but our information on the subject is unfortunately in an unsatisfactory state. Here the difficulty seems due in part to a lack of clear analysis of the situation, for in many discussions of the subject there has been confusion between the acute muscular fatigue of exercise, the kind of fatigue induced in children by long-continued restraint, as in school rooms, and the familiar nervous fatigue associated with over-excitement and inadequate sleep. Physiologically these represent very different processes and the relation of one to another is by no means entirely clear. However, it is to be hoped that further work on this important subject will be done from the scientific, from the clinical, and from the lay point of view.

CLIMATE

An effort has been made to appraise the relationship between climate and health and to evaluate various types of indoor living conditions, methods of ventilation, and so on. In regard to ventilation we can best summarize the present situation by saying that important work is being done in this field; the significant factors of temperature, humidity, and air movement are recognized, but no dogmatic rules as to the best types of ventilating systems for all purposes can yet be laid down. Further information is required as to the ideal conditions for children of different ages. What is ideal for the premature infant is not necessarily best for the older child. The relation of climate to the death rate, which is practically the only available index of its relation to health, has been worked out, particularly in regard to infant mortality, and a relationship which can properly be ascribed to climate and seasonal variations is described in the full report. Both in regard to seasonal variation in a given locality and to diverse climates in different parts of the country, there seems to be a certain optimum lying between the extremes of heat and cold. Consideration of the causes of death in relation to climate and season clearly show that this does not necessarily represent the best climate for the child on his own account, but is a compromise between this and the dangers of respiratory diseases, which run high in cold weather, and of intestinal diseases, which are prevalent in warm weather. The practical question is not one of improving the climate but of controlling these types of disease. The death rate from the digestive hot-weather group of diseases has fallen tremendously in recent years, presumably as the result of health measures and improved methods of food handling. The respiratory group has been little affected as yet, but we may hope for improvement with a better understanding of the relation between climate and artificial living conditions, and the relation of these to the causative agents and to the spread of these diseases.

AGE GROUPS

Not all periods of growth and development are equally well understood. The stage of maturity has naturally been most extensively studied, and the baby and the young child, as patients of the pediatrician, have also been given much attention. There

is something of a gap in our knowledge at the very beginning of life, in that the new-born infant is less well understood than the older infant. The prenatal development of the infant is not readily accessible to study, and it is not surprising that we are in relatively gross ignorance of many important aspects of the subject. The other period for which our knowledge is most defective is that of adolescence. The profound changes which are taking place in the individual both physically and mentally during this period are not adequately recognized, and because of the relatively large size of the boy or girl at this age physicians have usually thought of him as essentially an adult. Our present information, however, clearly shows that this point of view is unsound. Further study must be directed particularly to the prenatal, neonatal, and adolescent periods.

ANATOMICAL AND FUNCTIONAL CONSIDERATIONS

Most of the material dealing with this aspect of the subject is so technical and detailed that a summary at this point would serve no useful purpose.

It is worth noting, however, that in the description of the growth of the skeleton tables are presented indicating the age at which various centers of ossification appear and also at which the various epiphyses normally unite with the main portion of the bone, and we emphasize the usefulness of examining the state of ossification and the degree of epiphyseal union as indications of the maturity of the individual independent of his chronological age.

The modern view of the development of reflex function is of some general interest because of the extent to which ideas of the formation of habit and other mental functions have been based on reflex physiology. It now appears that, in place of the original appearance of specific reflex responses which later become organized into more complex patterns, the first responses to stimulation in the developing fetus are generalized and integrated. The development of specific localized response appears later as a specialization. This idea harmonizes with the present view of the development of conditioned reflexes which are believed to be intimately related to the processes of learning and habit formation.

The teeth should not be thought of as dead tissue formed by the body and thereafter independent of the general body condition and state of nutrition. They are to be recognized as living

tissues, intimately dependent on proper nutrition, notably in respect to minerals and vitamins. We may expect significant changes in our point of view toward dental caries and care of the teeth in the near future. The first teeth develop during fetal life and it must be remembered that the health and diet of the mother during pregnancy are significant factors in determining their quality.

In the description of the growth and development of the circulatory system the changes which take place at the time of birth are set forth in detail. The point of view is emphasized that the alterations in the heart and in the blood-flow through the lungs, which are associated with the beginning of extra-uterine life, take place gradually over a considerable period of time and not in the course of minutes or hours, as commonly supposed. A similar gradual alteration probably occurs in most of the other physiological adjustments which occur at the time of birth.

In relation to the thymus gland, the question is raised, on the basis of recent observations, as to whether the condition known as status thymicolymphaticus, which has frequently been held responsible for sudden death in young children, is a really significant condition. Recent roentgenological measurements of the size of the thymus gland indicate that it is normally much larger than had generally been supposed, since the old idea was based upon measurements made at autopsy on children dying after a wasting illness. It seems questionable whether enlarged thymus is ever a cause of death, but confirmation of the findings is desirable before a final pronouncement is made.

The endocrine glands, sometimes known as the glands of internal secretion, assume a position of special significance in relation to growth and development. It seems probable that hereditary tendencies toward greater or lesser growth in stature, and perhaps in various other types of physiological activity, are expressed through these glands and their mutual relations one with another. At the present time much intensive work is being done upon the subject, and we are beginning to see our way through a maze of conflicting clinical and experimental results. The secretion of the pituitary gland, for example, has been recently recognized to contain at least three separate active principles differing in their function, and some sort of controlling mechanism in the neighboring portion of the brain constitutes a significant part of the mechanism of the gland. The complexities of the situation do not

lend themselves to brief summarizing, but it is clear that this is an unusually fruitful field for more study and that one must be on his guard against hasty and premature generalizations. For example, it is apparent that the temperament and degree of mental activity of an individual is definitely affected by these organs, but it would be a mistake to think of them as the prime determiners of personality.

NUTRITION

Our knowledge of nutrition and food requirements is extensive, and we may speak with confidence on many aspects of the subject. For most practical purposes our knowledge seems adequate, but there is some danger of being carried away by our assurance and of believing that the goal has nearly been reached, and it is well to recognize clearly certain fundamental doubts which a critical examination of the situation reveals.

It is not known what the optimal rate of growth for the child actually is. We do know that increase in the quantity and quality of food may accelerate growth, and in animal experimentation the acceleration has been carried to a surprising extent. But we must seriously ask the question, "Is the bigger baby a better baby?" If growth is accelerated, do the organ systems of the body keep pace with one another in their development? These are questions calling for an answer at the present time.

It is known quite definitely that certain food materials are essential for growth, and furthermore that a certain quantity of food is required to supply the energy needs of the body over and above the structural requirements for growth. The concept of limiting factors in a diet has been clearly established; that is, a diet may be deficient, and growth and development consequently impaired in a variety of different ways. Any adequate diet must cover the minimal requirement for each and every one of these limiting factors.

The energy requirements which must be supplied to meet the needs for growth and activity at different age levels have been carefully studied, and in the full report the most recent and reliable figures are presented. They differ slightly from earlier figures in general use, in the direction of being somewhat more generous in the allowance for average energy requirements. Energy may be supplied by protein, carbohydrate, or fat, although

in practice carbohydrate is an economical source, protein a relatively expensive source, and fat has the advantage of yielding the greatest number of calories for a given weight of food.

The outstanding function of the carbohydrates is to supply energy. Fats likewise seem to serve the same primary function, since the body can form its own fat from carbohydrate if required. Proteins, on the other hand, furnish components (certain of the amino acids) which are essential for growth and cannot be built up in the animal body. All proteins are not equivalent in supplying these necessary building stones, but in a mixed diet the different proteins supplement one another's deficiencies.

The vitamins have recently been recognized as very important limiting factors, even though they are present only in minute traces in our foods and have not yet been isolated and identified chemically. Six separate vitamins are generally recognized and we are by no means certain that the list is yet complete. It is fairly well known which foods are good sources of the various vitamins, so that if they are considered in formulating a diet there should be no nutritional deficiencies in this direction.

Water is an essential foodstuff. It may become a very significant limiting factor in the case of infants and young children who cannot ask for it and who may in hot weather or certain diseases become seriously dehydrated. As a rule it need cause no special concern except in the matter of its purity.

The mineral constituents of the diet include a long list of necessary elements. Their significance is not yet completely understood, but we do know that not only one but many are essential. Among those recognized in practice as most likely to be deficient are calcium, phosphorus, iron, and iodine. These elements are usually specifically considered at the present time in evaluating diets, but we must be ready to recognize possible deficiencies in other materials, such as magnesium, copper, and other elements which enter into the composition of the body only in minute traces.

This definite knowledge of a technical sort can be translated fairly well into the more familiar terms of the actual foods which we buy in the market. The principles on which we may construct a reasonably safe and adequate diet in terms of these more familiar materials are presented in our full report. If the general character of the diet is to be in conformity with our usual American dietary habits, it is very desirable to include a

liberal quantity of milk, whether used in cooking or to drink, as a safeguarding factor, since milk from proper sources and properly prepared contains in adequate amounts a considerable number of the vitamins, minerals, and proteins which might otherwise be deficient in the diet. The value of milk as a safety factor is tremendous, but practical considerations and the quality of the other foods obviously must be taken into account. There are more ways than one of constructing an adequate diet, as the dietaries of other nationalities clearly show. We should not overlook the dangers in certain American dietary habits. One of these lies in the extensive use of highly refined cereal products by certain sections of the population. Furthermore, despite our relatively high national consumption of fruits and vegetables, these are insufficiently used by certain economic classes in some regions.

In spite of these theoretical and practical achievements the story of nutrition is not yet complete. Foods contain more than proteins, carbohydrates, fats, vitamins, minerals, water, and roughage. A vast number of other chemical compounds are known to be present in small quantities, and our experience with the vitamins and minerals teaches us that we may expect to find in the future that one or many of them may turn out to be essential dietary constituents. Furthermore, the particular form and combination in which the simple components are eaten may not be entirely a matter of indifference. We are acquainted with important instances of mutual relationships between the food constituents. A large quantity of fat, for example, demands a certain minimum of carbohydrate for its proper utilization, inability to assimilate fats may result in improper utilization of mineral elements, and so on. We must recognize the incompleteness of our knowledge and continue to seek knowledge with an open mind.

In the practical application of the principles of nutrition it must always be borne in mind that it is not sufficient merely to place before the child an adequate and well-balanced diet. We must be sure that faulty feeding habits or some underlying functional defect do not defeat our ends by obstructing proper eating and assimilation. This problem is dealt with extensively in the full report.

MENTAL DEVELOPMENT

Mental growth and development begin even before birth and continue throughout life. The particular phase which has been most intensively studied has been the development of intelligence, but the concept of mental growth is broader than mere intelligence: it may be traced in the earliest patterns of behavior exhibited by the infant and it excludes other aspects of the child's behavior such as his emotional reactions and social adaptations.

In view of the widespread use of intelligence tests and their practical applications it is pertinent to consider their significance and certain dangers inherent in their uncritical use. The first difficulty in the situation lies in the elusive nature of intelligence itself. In general we may think of it as an ability to adapt one's responses to complex situations, to solve difficult problems, and to think in terms of abstractions. To measure the intelligence of an individual we must rely on tests which give us samples of the individual's ability in different types of performance. This is done in all of the tests now in common use, but it is not to be expected that a given individual will make the same score on different tests, even though his performance may be quite reproducible with any one. For the sake of accuracy we should state not only the mental age of a child but specify by what test it was determined.

Our measurement of intelligence thus becomes the performance on one or another standard test properly administered. The tests are to a considerable degree arbitrary and their significance depends upon their proved relationship to attainment as judged by school progress, social adjustment, and similar standards. In most cases satisfactory so-called normal standards have been set up, enabling us to compare the performance of an individual with the expectation for his age. These standards include, as all standards of normal should, a fairly wide range of performance. This concept of the normal is developed more fully in connection with the evaluation of physical status.

Tests made on the same child over a period of years indicate that an individual who ranks relatively high in the early years will usually rank correspondingly high in later years, and the same is true for those of relatively low grade. This assumes a certain equality of opportunity for education, inasmuch as many tests now in use reflect verbal facility to a considerable degree, but, apart from this, education cannot cause a gross change in the intelligence of the child. The indications are that the poten-

tialities of an individual for the sort of accomplishment measured by the intelligence tests are determined to a high degree by his hereditary constitution. Other factors, such as malnutrition, illness, faulty habits of behavior or emotional influences, may interfere with the expression of intelligence. They may so affect the personality as to appear to retard or depress the intelligence, and it is useless to try to evaluate an individual's mental capabilities without due consideration for all such factors.

Inasmuch as intelligence tests reveal native ability they are useful in schools in the classification of children for instruction, in vocational guidance, and in the study of problem children. In the study and treatment of delinquent, subnormal, and gifted children they are indispensable. In industry they have a limited usefulness in the placement of workers; limited because many special abilities of a purely motor sort and the temperament of the individual enter into his fitness for a given type of work. As a tool for further research, notably in respect to such problems as the relative importance of the inborn as compared to environmental factors, they represent a method of great promise.

Inexpert administration of intelligence tests is an important source of error. Reliable results can be obtained only by trained and experienced observers who easily secure the subject's cooperation and give the tests in standardized fashion. An even greater danger is the misinterpretation of test results. School classification, for example, ought never to be based solely on test scores. Arbitrary diagnosing of a child as feeble-minded on this evidence alone is unsafe. No intelligence test samples the entire range of mental abilities, and the score made by an individual may or may not be closely reproduced on another trial. The test score should be thought of, not as a final verdict, but as a point of departure for further observation and study, to be supplemented by case history data, tests of actual accomplishment, and a careful consideration of personality traits. For example, the final decision as to feeble-mindedness should rest more on ability to make successful social adjustments than on the score of the mental test.

Tests of other abilities, such as motor skills, have been devised and elaborated, and are now in process of evaluation. They give promise of yielding significant information in the future. Tests for infants and young children, which partake of the nature of tests of motor accomplishments, inasmuch as this is the earliest form of ability developed by the child, are also being standardized

and give promise of enabling us to follow the course of their early mental development.

While heredity determines to a high degree the intellectual potentialities and many of the special abilities, such as musical, mathematical, motor coordination, and the like, it does not determine the use to which these potentialities may be put. The actual behavior of the child depends to as great or greater extent upon his emotional characteristics and on the degree to which his behavior is governed by sound habits. The concept of emotional maturity is one which is not yet fully developed, but the significance of good habits leading to emotional control is well recognized. Habit formation begins at birth, and it is the responsibility of parents and of the physician who advises them to see that a proper beginning is made and consistently and intelligently carried out. Bad habits, allowing of excessive self-assertion, may greatly handicap the child in his later social contacts, in his emotional stability, and may even affect his nutrition through his failure to take and assimilate food properly. A recognition of the importance of these factors and an understanding of their mechanism becomes the duty of every physician; and with this matter of habit training we may include a sound and sensible attitude toward sex habits and instruction.

The development of personality and character have been discussed by many investigators. The subject is in a highly unsatisfactory state at the present time, largely because of the extreme vagueness of the primary ideas involved. The most valuable contribution to this field would be a clearer definition of objectives and more ingenious working hypotheses than those involved in "traits" and "types."

The relation of socio-economic factors to mental and also to physical development is likewise vague. Here again the difficulty lies in the impossibility of obtaining significant and satisfactory measures of the factors which we wish to relate. Clear analysis of the situation and formulation of adequate methods is urgently required, and a recognition of such facts as that the size of the family income gives no indication of the wisdom and intelligence with which that income is expended.

THE APPRAISAL OF THE INDIVIDUAL CHILD

The most immediate practical objective in the study of the growth and development of children is that of obtaining a standard of reference for evaluating the individual and ascertaining whether or not he is fully realizing the possibilities which lie in his hereditary constitution. Our idea of what may be expected of any individual must be based upon a study of what is actually to be observed in a large group. We wish to know whether or not a given child measures up to the standard of the group.

The term "normal" deserves special consideration because of the different implications which attach to it. By this term we wish to imply the absence of ill health or functional incapacity. It is also widely used in the sense of average, typical, or standard, but there is a danger in applying it uncritically in this way. As large numbers of individuals have been studied it has become more and more clearly recognized that they may vary a great deal one from another. Yet most of these variations do not carry with them any implication of inadequacy or incapacity in terms of the demands of ordinary life. They rest on differences in the inherent make-up or constitution of the individual. It is a mistake to consider such variations as abnormal simply because they differ from the average or mean. If we set up any standard of reference it must include the idea of a permissible range of variation, and the limit of the normal should be set as that point at which some sort of handicap or funtional incapacity is found to occur frequently. The limits may sometimes be arbitrary, but this is far sounder than to fail to recognize that a considerable range of variation must be included in the normal. The determination of the extent of this range is part of the problem of setting up any standard. Each individual has his own potentialities for growth, and the problem of evaluating the individual is the problem of determining to what extent his possibilities are being realized.

The determination of standards from the measurement of large numbers of individuals and the degree of variation to be expected within a group, is one which involves the statistical method. This is essentially a mathematical technique which enables us to determine what sort of groups should be selected for such measurements, how large the groups should be, how the adequacy of the measurements should be tested, and how the resulting data may be treated in order to determine the relationship between the different

variables which have been measured. A brief discussion of these principles of measurement and statistical handling of data is included in the full report.

Many anthropological measurements other than the familiar ones of height and weight have been employed and found of service by various investigators in determining the growth, development, and fitness of children. These are briefly reviewed in regard to both technique and significance.

The rate of growth of children at various ages is considered and also the statistical relations between age, height, and weight, but it should be clearly understood that our committee has not attempted to set up new standards as to the "normal" height or weight in children of different ages. The relation of weight to age and height has been widely employed as a measure of the state of nutrition of the individual child, and here is to be found an instance of the danger of a too rigid acceptance of a standard. Many children thus rated as underweight, with the implication that they are undernourished, are found on further study to have the weight which is normal for them in view of their other skeletal measurements. A slender child with narrow hips and shoulders may be quite adequately nourished, yet appear abnormal if judged by standards which do not take account of variables other than age and height. Further extension of our knowledge in the direction of finding proper standards which allow for such factors as race, heredity, skeletal proportions, and so forth, are still required. Until these are developed, however, the present tables are serviceable if used with judgment.

In appraising the physical fitness of a child, a complete physical examination forms the nucleus of the material upon which an opinion must be based, and in our complete report considerable space is devoted to the technique of such an examination. A good part of the examination is for the purpose of detecting any actual or incipient disease process which handicaps the individual or which may do so if due precautions are not taken. An adequate physical examination should include functional tests of vision and hearing, as serious defects of these senses are often overlooked. In our discussion the different features deserving particular attention at different age levels are pointed out, as well as differences in the anatomy and physiology characteristic of various ages, against which any abnormal findings must be recognized.

In spite of the importance of the physical examination, its

limitations should not be overlooked. The failure to recognize signs of a pathological process by the clinical examination of a given organ cannot always be taken as conclusive evidence that no pathological process is present. There are other methods for collecting evidence which must frequently be resorted to before drawing positive conclusions. As illustrations we might refer to the clinical examination of the lungs and the supplementary evidence obtainable from roentgenological examination, and to inspection of the tonsils as compared with a carefully elicited history of infections of the upper respiratory tract.

Much more significant than a single physical examination is a series of them made at regular intervals by the same physician. Through such a series of examinations he obtains more than a static picture of the condition of the child at a given moment. He obtains an insight into the rate of progress of the individual, and in many cases the rate of growth is of far more importance in evaluating his status than the particular level which he may have attained. It is of profound importance that this idea of periodic health examinations permeate the community, for aside from the benefit accruing to the individual child, we feel that it is along these lines that greatest progress can be made in achieving wider knowledge of the course of normal growth and development, and of disease.

The physical examination alone is inadequate for a total appraisement, for one aspect of the child's life cannot be investigated to the exclusion of others. We must include a study of the child's heredity, his economic status and cultural background, the detection of abnormalities or disease process whether actual or potential, the history of previous infection and exposure to infection, his usual diet and routine of living. At least an elementary appraisal of the mental status of the child should also be included. Although the average physician is at present not well equipped by training or experience to evaluate mental factors, there is no real reason why he should not be prepared to pass valid judgment on all except the most complicated situations. It is a matter for careful consideration and investigation to decide just what part the pediatrician must play in recognizing and handling the behavior problems which arise in many fields of the child's activity. Whether or not he is to deal with them, he is usually the first to have the opportunity of recognizing them, and to this extent, at least, a heavy responsibility falls upon him.

DISEASE

The effects of disease upon growth and development depend on the type of disease and the severity with which it attacks the particular individual. A given disease may be more or less significant in its influence and vary in its manifestations with the age of the individual. These broad age differences must be recognized, and likewise the individual differences in the reaction of various children of the same age. The degree of immunity, whether natural or artificial, which has been acquired by a child, is an important factor in determining both the incidence and severity of a disease. In many cases the degree of immunity tends to increase or to diminish with advancing age. Numerous specific effects of particular diseases are recognized. In a general way, however, we may say that during the acute course of any disease the processes of growth and development are retarded, but that during convalescence there is a tendency not only to return to the original rate of growth but to make good the retardation due to the illness.

The damaging effects of disease can be minimized in three ways: First, and most obviously, by the prevention and control of disease; secondly, by skillful care and treatment of the child while the disease is in progress; and, thirdly, by due protection and adequate nutrition during the period of rapid recovery and growth during convalescence. Of these, the one most deserving of attention at the present time seems to be the preventive method, whether through the control of epidemics, recognition and treatment of incipient disease, or through increasing the immunity and the powers of resistance of the individual child. For a more adequate conception of the effects of disease, especially the particular effects which depend upon age differences, it is important to acquire further knowledge of the normal processes of growth and development.

B. COMMITTEE ON PRENATAL AND MATERNAL CARE

It has been the purpose of this committee to confine itself to prenatal and maternal care.

The age period to be covered by the Section on Medical Service is from conception to the eighteenth year. This naturally includes a consideration of fetal life, more commonly known as antenatal or prenatal life. During this period of development the fetus is absolutely dependent upon its mother for its own welfare. With the beginning of extra-uterine or postnatal life, the dependence is not so absolute, but is none the less an important actuality. Under favorable conditions the infant can survive even though the mother succumbs when the child is born. The infant is no longer dependent upon the mother for its supply of oxygen, as respiration is, of course, established at birth. This fact is of immense importance, not only to the infant, but to a proper understanding by all of us as to what really constitutes extra-uterine life. The successful transition from intra-uterine to extra-uterine existence depends upon the establishment of respiration. It is common knowledge that the heart functions in utero, as do other involuntary muscles and the skeletal muscles, but the lungs do not function.

It is a general practice to report as live-born, any fetus of 20 weeks' gestation or more which exhibits any sign of life after it is born. This accounts in a great measure for the large number of infant deaths which are reported as of the first day. It is our conviction that these fetuses and infants, i.e., those not breathing but showing other signs of life, should not be included among the live births unless respiration has taken place. They should be treated as a separate group. Practically all States require the reporting of births after the fifth month of gestation and some require the reporting of births prior to this period. The inclusion in the vital statistics of previable infants of from 20 to 26 or 28 weeks' gestation increases very materially the infant mortality rate. It also has had the effect of maintaining a high early infant

mortality rate, because prior to the last two decades, births were not commonly reported until subsequent to the period of viability, i.e., 26 to 28 weeks' gestation. Many infants are born and show other signs of life, but never breathe. Respiration should therefore be considered as the sole criterion of distinction between the termination of intra-uterine and the beginning of extra-uterine life. In other words, a fetus is not an infant until it breathes.

The dependency of the infant upon its mother during extra-uterine life is more relative and environmental than absolute. In primitive surroundings the infant was dependent more absolutely upon the mother for protection, the maintenance of body heat, and the securing of sustenance than under our present conditions of civilization.

One could summarize the absolute requirements for the survival in early infancy as being: (1) Nutriment, (2) maintenance of body temperature, and (3) protection from enemies and harmful influences. The success of mothers or maternal substitutes in rearing infants depends largely upon their knowledge and ability to fulfil these general requirements.

It is well known that many mothers die or suffer temporary or permanent disability from incidents or accidents of pregnancy and childbirth.

With these facts in mind, the Committee on Prenatal and Maternal Care has proceeded upon the assumption that anything which disables the mother or handicaps her in her relations to her child must have a definite influence upon infant and child health and protection. The committee has been organized with five main sub-committees made up of men and women well qualified to consider the various factors affecting prenatal and maternal care. Although all of the individuals serving on these committees are busy with other activities, they have given generously of their time and energy for this work.

The general form to be followed in the ultimate committee reports was discussed, and it was agreed that they should include:

I. Past Experiences—
  Primarily in the United States.
  Secondarily in other countries and their applicability to solution of problems in this country.

II. The Status Quo—
  In this country.

In other countries where it has a bearing on conditions in this country.

Analysis of activities which are of no value or relatively little importance.

(Stress important things).

III. Suggestions and Recommendations for Future Plans and Activities—

(Some attempt should be made to evaluate and rate according to their actual and relative importance).

IV. Methods of Accomplishing the Results to be Desired, viz., The Protection and Betterment of Mothers and Children.

In addition to the five main sub-committees there are several special committees, one of which is an advisory committee. There is also a special committee to make a study of comparative statistics and statistical evaluation as applied to maternal, fetal and early infant mortality. It was further deemed necessary to have certain liaison committees, of which the two principal ones are: one to articulate with the Committee on Communicable Disease Control, Section II B; the other to make a liaison with reference to prenatal care with the Committee on Medical Care for Children, Section I C.

The material of this committee, however, is not yet fully completed and ready for presentation. Information is still being assembled and much of that which has been accumulated is still being tabulated and edited.

OBSTETRIC TEACHING AND EDUCATION

Education is regarded as fundamental to securing the proper program for Prenatal and Maternal Care. The chairmanship of this sub-committee was assumed by the Chairman of the entire Committee on Prenatal and Maternal Care. This sub-committee was divided into four groups.

Obstetric Teaching and Education of Physicians

Group I, dealing with the education of physicians for the practice of obstetrics, was in turn divided into two parts. One deals with undergraduate education, i.e., the preparation of the student for his M.D. degree and the granting of his license to practice medicine and surgery. The other deals with the education of the physician after graduation.

The undergraduate teaching is mostly of a general type. It

consists of didactic and conference courses with clinical instruction of different types both for large groups and small sections. Clerkships are used in some schools. There are also laboratory and manikin courses given in some institutions.

There are a number of varieties which might be called postgraduate obstetric education. These might be grouped into:

A. Refresher courses—
   1. Where the education is taken to the doctor in or near his own community by means of circuit or extension courses.
   2. The presentation of obstetric topics to physicians at medical meetings, clinics, and so on.
   3. Short courses given at institutions for varying periods of time from a few days up to three months, where practitioners may enhance their knowledge of obstetrics.

B. A type of intensive course occupying from approximately three months to a year where men secure special training, but not necessarily with the idea of becoming specialists.

C. A type or variety which is specially designed for the training of specialists in obstetrics usually in conjunction with gynecology. In this country these courses are of more recent development with a few exceptions; these are the postgraduate courses where men serve in hospitals as assistants and residents, usually working with specialists who are more or less well established in their specialty.

D. Another type of graduate work, in the accepted sense of this word, is where men are developed in connection with teaching institutions to become practicing specialists; this period of training requires from 3 to 5 years.

E. Another variation of this graduate instruction is the course designed to develop not only specialists but also teachers, investigators and educators in the field of obstetrics and gynecology. This period of training should take from 5 to 10 years. This is not usually carried out with the doctor continuously in the position of a student, inasmuch as he frequently takes the position of a teacher and occupies, during a considerable portion of this training, a subordinate position in the departmental teaching staff.

This plan of developing specialists for practice and specialists for teaching is of somewhat recent development in this country. Most of the specialists of the present day have had to acquire their training by various methods, most of which have been worked out by themselves in times past and not always with adequate supervision and assistance from more experienced specialists.

The group dealing with obstetric teaching of physicians has analyzed the courses outlined in the catalogs of the medical schools which offer courses in obstetrics. Various types of questionnaires have been sent out to the deans of medical schools, to the heads of the departments of obstetrics and gynecology and also to recent graduates. While the responses have not been complete, it is thought that the data secured are representative. The question of obstetric teaching and education has also been approached from the angle of the hospital. Questionnaires were sent to the executive heads of hospitals, in different communities, which had over one hundred deliveries a year. These questionnaires were intended to bring out the educational facilities and the methods pursued not only in undergraduate teaching, but also in graduate teaching in medical schools and hospitals. These various questionnaires have been and are being analyzed and tabulated so that the information obtained can be presented in some form which will be of value as a basis for recommendations.

A great deal of the literature which has been published upon this subject during the last 10 years has been reviewed and it is apparent that we have not yet fully attained the ideas and ideals of obstetric teaching which were set up many years ago. It is probable that in most instances the didactic and demonstration work is satisfactory and reasonably well done. Apparently, obstetric clinical instruction has fallen down due to the dearth of patients which could be used for the instruction of students. With increased hospital facilities and a greater number of patients confined in hospitals, this has been overcome in many localities and in many institutions. On the other hand, this has probably led to some defects in the teaching of the conduct of labor in the home, and until recent years the instruction given in prenatal and postnatal care has been very meager. Much of the supervision and instruction given in home deliveries has been and still is characterized by its absence. Many of the cases requiring home care have been delivered in their homes by students who were not well trained in obstetrics and received little or no supervision during the conduct of the case. Insofar as the management of maternity cases in hospitals is concerned and the development of training and education, the situation has been considerably improved in recent years, as 12 of our medical schools now require the so-called intern year for the granting of an M.D. degree. A maternity service is included in most of these so-called intern years.

This has affected graduates from the years 1915 to 1930. One other school has made this requirement applicable to the graduates of 1933. The licensing boards of twelve different States and the District of Columbia require the hospital intern year before granting the license to practice medicine and surgery. This has been applicable in the different States from the years 1914 to 1930. Many of the hospitals available for internships are approved by the American Medical Association and the American College of Surgeons.

Most of these hospitals have an obstetric service, but this is not universally true. Of 642 hospitals in the continental United States approved for internship in 1930 by the Council on Medical Education and Hospitals of the American Medical Association, there were only 16 that had no provision for obstetric service either in their own institution or through affiliation with another institution.

A study of reports secured from 1491 physicians regarding their intern experience in obstetrics, published by the Council on Medical Education and Hospitals of the American Medical Association, shows the following: 65 did not reply to the question relative to the number of deliveries which they had conducted, 106 did not reply to the question relating to the number of deliveries in which they had assisted; there were 334 who replied "no deliveries" to the former question and 235 who replied "no assisting" in any deliveries; there were 499 who stated they had assisted in deliveries but did not give the number; there were 217 who conducted under 10 deliveries, 641 who conducted from 10–49 deliveries and 234 who conducted over 50; there were 52 who had assisted in less than 10 deliveries, 282 had assisted in from 10–49 and 317 in over 50. It is easily understood that a hospital obstetric experience helps recent graduates very materially in their preparation for obstetric practice. This intern service really constitutes a phase of postgraduate and graduate medical education which has undergone considerable development in this country during the last decade or two and is of great educational value in obstetrics.

The type of postgraduate and graduate instruction varies greatly in different medical institutions. In some it is informal, but none the less educational and developmental in character. In others this instruction is of a more formal type and is graduate work, in the generally accepted sense of that term, leading to the granting of an advanced or graduate degree. This sub-committee hopes to have a rather complete and formal presentation relative to

both undergraduate and graduate medical education in obstetrics and gynecology.

Of more recent development are the extension and circuit courses. The propaganda for better maternal care has stimulated practitioners to seek, and institutions to give, courses for men already established in practice.

In the main there have been two plans, one where the practitioner attends meetings of societies or courses in institutions, which is not a particularly new method of medical instruction, and another type where the instruction is taken to the physician by volunteer or part-time instructors. The method of accomplishing this has varied considerably in different institutions and communities. The results of the work seem to have been very positive and favorable.

Obstetric Teaching and Education of Nurses and Nursing Attendants

This aspect of the investigation on education and training constitutes the second group.

The nursing profession is more completely developed in the United States than in any other country. Most nurses, during their course of training, receive some obstetric experience. This is frequently not good and often entirely inadequate. Some nurses, who are interested in obstetrical nursing, make a point of securing additional education and training along this line. In addition to the trained or registered or licensed nurse, there are also other so-called practical nurses, who have had much to do in many communities with the care of mothers and babies. Many of these practical nurses are self-taught; some of them become very capable, but others are ignorant, untrained and a menace to both mother and child.

The so-called nursing attendants or nurses' aids are of more recent development, and this type of nurse or attendant has not on the whole been very successfully developed. In order to secure the best information and with the idea of developing some definite suggestions and recommendations, this group was divided into four sections consisting of: (1) An executive committee; (2) obstetric nursing in institutions and hospitals; (3) obstetric nursing in homes, including obstetric phases of public health nursing; (4) trained attendants, nurses, and so on.

The Committee on Obstetrical Nursing in Institutions and Hospitals has developed the following plan of work:

a. Through questionnaires to ascertain what is expected of the obstetrical nurse by: (1) The doctor, (2) the patient.
b. To determine the present facilities for preparation of nurses for obstetrical work.
c. To consider what the content of obstetrical training should be:
   (1) For the undergraduate, i.e., what preliminary experience is required; how and by whom the lectures are given, the content, the number of hours and by whom the practice and classes are given.
   (2) For the graduate, a plan for keeping the graduate nurse up-to-date on current practices. The questionnaires regarding the preparation of the registered nurse have been sent to schools of nursing and to official registries. The committee has conferred with the medical committees and secured information from grading committees relative to patients' needs in relation to obstetrical nursing. They hope through a study of the data to make definite recommendations to improve training of nurses in obstetrics.

The Committee on Obstetrical Nursing in the Home, embracing public health nursing and private duty nursing, has presented the following program:

a. To obtain a survey of present preparation of nurses by studying a fair number of records which will show the training and experience of individual graduate nurses now practicing throughout the country.
b. To study the obstetrical content of postgraduate courses not in operation.
c. Through a questionnaire to be sent to a geographically representative list of organizations to ascertain the amount and quality of obstetric teaching included in staff education programs. From a study of data from these sources, the committee plans to evaluate the adequacy of obstetrical knowledge and quality of service rendered to maternity patients in the home, and to suggest a plan for further education of graduate nurses in maternity care.

The Committee on Obstetrical Nursing by Trained Attendants, including nurses' aids and any other group of sub-nurses, has sent questionnaires to all schools where attendants, and so on, are trained, in an attempt to get the following information: (a) The number of schools; (b) number of attendants trained each year; (c) content

of the course; (d) what attendants do after graduation; and (e) plan, if any, for postgraduate training or supervision.

As a result of this survey, the committee plans to recommend a standard for training, organization and supervision of the subnurse group.

Education and Training of Midwives

The midwives of this country have not been and are not now comparable in any degree to the well-trained midwives of Europe who, in the more highly developed countries, are trained in their work for two and three years. They are further subsequently controlled and supervised, and work constantly in cooperation with well-trained obstetricians.

Intensive training, control, supervision and cooperation of European midwives with well-trained physicians who are specialists in obstetrics, are the factors which account for the successful practice by European midwives.

Such conditions have not and do not exist in this country. Some local, and more or less successful, attempts have been made in this country to emulate these European standards, but all the underlying principles are not usually met.

Information has been secured through the various state boards of health and licensing boards and the Children's Bureau with reference to the number of midwives in the several States, the education and training they have received, the requirements for practice, and the supervision and control exercised over them. This information has been secured by questionnaires sent to state officials and from the experience and contact of the different members of the committee. A review of the literature relative to the history of midwife practice and the present methods in some foreign countries has been attempted.

The report embodies certain recommendations relative to the management of the midwife problem. For convenience it is called group three.

The ultimate solution of the problem of good obstetrics lies not in the midwife, but in developing a sufficient number of doctors who are well trained in the fundamental principles of obstetrics. The development of such doctors is a direct responsibility of the medical schools.

At the present time, the midwife is a necessity; she cannot be

eliminated in some sections, and every effort should be made by the profession to improve her as rapidly as possible.

THE NEED OF EDUCATION AND CONTROL

Significant educational needs stand out:

1. The practice of midwifery should always be under the supervision and control of direct medical authority.
2. Recognized institutions for the training of midwives must be established if present conditions are to be permanently improved.
3. Such institutions, properly run, would assure: (a) Preliminary education; (b) proper training.
4. Anything less than this is temporary alleviation and not permanent relief.
5. Inasmuch as the need for midwives seems greatest in those communities having a large colored population, it would seem wise: (a) That institutions for the proper training of colored midwives be established; (b) that such institutions should be located in the South where a wealth of controllable clinical material is available; and (c) that such a training would offer the colored trained nurse a larger field of activity.
6. Plans should be formulated for postgraduate courses for keeping midwives up-to-date.
7. The establishment of such institutions is a community responsibility.
8. Plans should be formulated for the official control of midwives. This control would regulate:
   (a) Requirements for licensure
   (b) Adequate supervision by obstetricians and qualified midwives.

PRESENT CONDITIONS

Significant facts on present conditions are as follows:

1. It is practically impossible to determine the number of midwives practicing in the United States.
2. It is probable that 47,500 is a conservative estimate.
3. The numbers have been vastly reduced during recent years.
4. But few of these women have had any training in midwifery.
5. In the past few years almost every State that has a midwife problem has provided some sort of supervision and elementary instruction by nurses.
6. Under the State Department of Health, this supervision has, in large part, been done by nurses who themselves have not been trained in midwifery.
7. Only a few States have adequate legal requirements for their licensure.

8. Most of the States are attempting the control of midwives without giving them adequate preparation for their practice.
9. Some States do not recognize the midwife.

THE IMPROVEMENT OF PRESENT CONDITIONS

The following suggestions are submitted for the improvement of the education and training of midwives:

1. These conditions under our present economic situation cannot be at once relieved, but should be improved as rapidly as possible. This improvement should be brought about by local effort. The committee feels that, inasmuch as the midwifery need seems greatest in those States where the economic status is low, aid is needed and would greatly hasten the relief of present deplorable conditions.
2. The committee is aware of and appreciates the good work that has been done in recent years by many State Boards of Health.
3. The committee feels that this work should be continued under such supervision.
4. The committee appeals to the individual State Boards of Health to develop standards of midwifery supervision and instruction.
5. A system of control should be developed and improved by each State that has a midwife problem. The committee believes that many of these problems are local and can best be solved by local administration.
6. Efforts should be immediately made to develop properly trained supervision.
7. Public health nurses with midwifery training would be an admirable solution.
8. Qualifications and supervision should be gradually raised until the standards that have been suggested are reached.
9. If actively and adequately sustained, such a plan would, in the course of time, automatically solve the midwife problem.

Education and Training of the Lay Workers and the Education of the Laity

This group, constituting the fourth group on education and training, is made up of two divisions, one dealing with the education and training of the lay workers or social service workers, the other with the education and training of the laity on the subject of maternity. This group consists of obstetricians and lay workers.

The lack of information among the laity regarding the importance of problems of maternity and the desire to conserve human

life and minimize human suffering has been largely responsible for the educational program in maternity and infant care which has developed within recent years. The necessity of conserving and preserving human assets has been and is of importance to the State. The purpose of this committee is to evaluate the subject matter and methods of this educational program.

The lay workers, mainly social service workers, are also a product of the present generation. They are a necessary and vital adjunct to solving many social, economic, and medical problems and their education and training is of great importance to the end that they may have a comprehensive understanding of the many problems associated with maternity. This committee proposed to investigate the present status of their education along these lines and to suggest means of improvement. To this end two questionnaires have been sent out, one dealing with the training of the social worker in the schools, to find out exactly what she is being taught in regard to prenatal and maternal care, and what is the standard of prenatal care toward which she is working. The second questionnaire was sent to maternity hospitals, clinics, maternity homes and rural communities to determine what the individual social worker in charge of the maternity department does, who she is and what training she has had for her work. One group of hospitals, to receive these questionnaires, was selected from large cities and another group from small cities and an attempt was made to have all sections of the country represented. The committee has also tried to secure information in regard to social workers in rural communities, and public health nurses whose duties include social service work.

Information regarding work done for the education of the laity in prenatal care has been secured from various agencies.

The cost of medical care has also been considered to some extent as it is one of the obstacles to good standards.

Published articles, pamphlets and other literature on prenatal and maternal care have been reviewed.

This report will contain the results of their investigation, indicating which types of work are satisfactory and which are not, and will make recommendations for future educational work, but the material is not assembled for inclusion in this summary report.

MATERNAL AND EARLY INFANT CARE

The purpose of this sub-committee is to study the situation in urban and rural communities, in institutions and homes, and also to consider the question of race. It is studying the methods of doing work in various communities by physicians, nurses, midwives, social workers, dentists, and nutrition workers. Following this study, suggestions and recommendations for a practical set-up approaching the ideal are to be made for varying conditions in the different types of communities in this country.

The method of work of this sub-committee has varied considerably. Some of the members have attempted to secure their information by means of questionnaires, others from their own personal knowledge and review of the literature. Different members of the committee have undertaken the responsibility of securing information from sections with which they are familiar. In addition to this, certain phases of the problem have been assigned to various members of the committee.

Questionnaires have been sent out relative to the care of mothers and babies in maternity homes, to secure some information as to the type of care furnished unmarried mothers and the status of this type of work in different communities.

An analysis of 98,000 live births and 3,600 still births in New York State has been made which shows that 25 per cent of maternal deaths in urban hospitals were non-residents of the urban area, and that over 21 per cent of fatal cases of puerperal sepsis were admitted to the hospital during the delivery.

Other studies have been undertaken in New York, Tennessee, Kentucky, Minnesota, Connecticut and New Jersey. Data will be available to the committee from a study of maternal deaths conducted in Kentucky through the cooperation of the State Board of Health and the Children's Bureau at Washington. This study covered the cause of deaths, month of gestation, urban or rural deliveries, institutional or home deliveries, white or colored, prenatal care, antiseptic precautions taken at delivery, method of delivery, and so on. A study of fetal deaths is also being undertaken in the same State. The committee is also studying the death rates in the different classes of institutions for the white and colored. Prenatal dispensaries are being studied as to the routine maternity care given and an endeavor is also being made to ascertain something of the maternity care given by physicians. A ques-

tionnaire has been sent to all hospitals giving maternity care, asking for information relative to the number of abortions under 16 weeks in 1929, number of miscarriages between the 16th and 28th week, number of deliveries after the 28th week, number of still-births, number of neonatal deaths within the first two weeks of life, number of maternal deaths and causes. The committee is also endeavoring to discover what provisions the hospitals have for maternity care and for the segregation of maternity cases.

This sub-committee has not as yet completed its work, but in a preliminary report it has called attention to sources of error in the statistics on deaths during pregnancy and child birth due to incomplete and inaccurate certification of such deaths and, second, due to errors in classification. The committee is of the opinion that many deaths from puerperal causes are omitted and that deaths resulting from abortion and ectopic pregnancy should not be charged to maternal mortality. The correction of past errors in improved certification of causes of death might affect the trend of mortality rates, changing the downward to a stationary or an upward trend.

With reference to the influence of race, our statistical and clinical experience confirms the statement that the death rate from all puerperal causes is much higher among the negroes than the whites. In the consideration of urban and rural records, it appears that the maternal mortality rate is higher in urban than in rural districts. It is a possibility that some of this difference may be explained by the recruiting of some 15 to 20 per cent of urban births from the rural districts. It is also possible that abortions may be much more prevalent in urban communities. Deaths from complications following abortion contribute materially to the maternal mortality rate.

The percentage of hospital cases varies remarkably in different communities. The available data indicate that the hospital cases range from 10 to 65 per cent in different localities in the various States and even higher in some communities.

Some analyses indicate that where the place of delivery is considered there is little difference in the maternal mortality rate in the hospital and the home. Statistics with reference to home versus hospital deliveries in entire States are not at present available for many, but the committee hopes to include statistics from 15 States in its final report.

Investigation of maternal mortalities by States shows a great

variation in different communities, but in all, puerperal septicemia is the cause of the largest percentage of maternal deaths. Puerperal albuminuria and convulsions is the next most frequent cause. Attention is also called to the fact that puerperal infection seems to be more prevalent during February and March, possibly due to the increase in upper respiratory infections. The committee stresses the importance of hospitals having adequate provision for the separation and segregation of obstetric cases from the other cases in the institution. The importance of having separate personnel in attendance on the cases is also emphasized. The committee feels that prenatal and postnatal care in general is poorly organized and inadequately given. In the country as a whole only a small proportion of women receive adequate prenatal and maternal care. The last 15 years have seen a definite improvement in the extent and character of prenatal care and more recently there has been a change for the better in rendering adequate postnatal care. Many physicians and clinics are giving greater attention to consecutive ante-partum, intra-partum and post-partum welfare. It is important to have consecutive care with proper follow-up from the prenatal care to appropriate intra-partum and post-partum attention. Very little attention has been given to post-partum and postnatal care except in the immediate puerperium. The importance of this phase of maternity care should be more commonly appreciated. Insufficient attention has been given to dental hygiene, but the importance of proper dental clinics for maternity cases has been recognized and is well developed in some institutions. Many physicians have seen the value of this type of maternity care. This has been rather slow to develop, partly because of the prejudice and fear of dental work during pregnancy.

There should be a combination of consecutive and complete and expert prenatal, intranatal, and postnatal care available for all prospective and actual mothers. This should be administered by the combined activities of social workers, nurses, possibly midwives, and also by dentists and doctors. All of these activities should be participated in, supervised and controlled by trained obstetricians. This care should be provided for in the home and hospitals and available in all communities, both rural and urban for all racial, economic and social groups.

INTERESTED ORGANIZATIONS

The purpose of this committee is to study the activities, programs and plans of organizations, mainly those of national scope, interested in prenatal and maternal care. The following list of organizations is being considered:

1. Children's Bureau, Department of Labor, U. S. A.
2. Census Bureau of U. S. A.
3. Health Officers of Departments of all States and District of Columbia
4. U. S. Public Health Service
5. American Red Cross
6. American Gynecological Society
7. American Association of Obstetricians, Gynecologists and Abdominal Surgeons
8. American Medical Association
9. Women's Auxiliary to the American Medical Association
10. American Dental Association
11. American College of Surgeons
12. Association of American Medical Colleges
13. National Board of Medical Examiners
14. Federation of State Medical Boards
15. Catholic Hospital Association
16. National Organization for Public Health Nursing
17. Visiting Nurses Association
18. American Public Health Association
19. American Child Health Association
20. Commonwealth Fund
21. Metropolitan Life Insurance Company
22. Duke Foundation
23. Committee on Cost of Medical Care
24. Rosenwald Fund
25. Rockefeller Foundation.

The committee has attempted to secure first-hand information relative to the past activities of these organizations, their present activities, and programs planned for the future. The committee wishes to ascertain what fields are not being covered, and which ones are being duplicated, and as a result of this study make recommendations regarding the coordination of the different activities to the end that a more perfect understanding and a more complete organization can be worked out. It is also thought that certain desirable features can be stressed which may help these various organizations in accomplishing their purposes. This committee has

also functioned as a service committee for some of the other committees.

This sub-committee is working as rapidly as possible to complete its report, but it is not possible at this time to give definite information relative to the results of this work inasmuch as the preliminary report is not now available.

FACTORS AND CAUSES OF FETAL, NEWLY-BORN, MATERNAL MORTALITY AND MORBIDITY

The following outline was submitted by the sub-committee treating this subject:

A. Analysis of factors and causes of morbidity and mortality
   (1) Race—important
   (2) Sepsis
   (3) Toxemias, and so on
B. Prevention
   (1) Communicable diseases (overlaps Section II B)
   (2) Other
C. Research problems into factors, causes and methods of prevention
   (1) Include both medical and social problems
      (a) maternal
      (b) fetal and neonatal
      (c) sterility, fertility and sterilization
      (d) heredity and anthropology.

Discussions of the following subjects are being prepared by various representatives of the committee:

1. Immediate Care of the Newborn
2. Febrile Puerperium
3. Obstetric Work among Indians
4. Afebrile Anomalies of Puerperium
5. Anesthesia and Pain Relief in Labor
6. Intracranial Traumatization
7. Postnatal Care
8. Pregnancy Complicated with Acute Infectious Diseases
9. Pregnancy Complicated with Kidney Diseases
10. Pregnancy Complicated with Heart Diseases
11. Morbidity and Mortality Statistics
12. Pregnancy Complicated with Parasitic Infections
13. Toxemia of Pregnancy
14. Obstetric Work among Chinese
15. Pregnancy Complicated with Syphilis
16. Pregnancy Complicated with Malignant Diseases

17. Influence of Maternal Radiation on the Health of the Subsequent Child
18. Pregnancy Complicated with Diseases of Endocrines and Blood
19. Caesarean Section and Forceps
20. Pregnancy Complicated with Tuberculosis
21. Abortion
22. Obstetric Work among Negroes
23. Diseases of Teeth and Gums in Pregnant Women
24. Induction of Labor.

The plan of the committee is:

1. To determine if possible where we stand concerning maternal and infant morbidity and mortality in relation to other countries and suggest certain changes in the statistical classification in order to clarify such reports.
2. To determine, if possible, what systematic prenatal care has been used in reducing maternal and fetal morbidity and the relationship of this particular activity upon diseases and abnormal conditions complicating pregnancy.
3. To determine how far certain diseases complicating pregnancy affect the present or future health of the mother and influence the progress of pregnancy, including the effect upon the genitalia, the newborn, and the infant in later life. To determine whether temporary or permanent prevention of further pregnancies is justified, also whether artificial interruption of existing pregnancies is justified. To show what relation diseases have to this subject, if racial peculiarities influence pregnancy, to determine what good or bad effect can be proved in regard to certain obstetric operations and procedures, to determine the relation of superstitions, customs, etc., to morbidity and mortality, to study the accidents of pregnancy, labor, puerperium and lactation in relation to maternal and fetal morbidity and mortality. It is evident that at present statistics do not bring to light all the facts, partly because the classifications of death are not uniformly agreed upon. What is neonatal? Deaths are reported as due to prematurity. (What does this term mean?) Debility and asphyxia are both terms without a precise meaning. As a matter of fact, we actually know that many of the infants whose deaths are assigned to these causes have died of intracranial or other injuries.

It is felt that an unbiased critical analysis of this extremely unsatisfactory situation relative to the classification of early infant deaths should be part of the report of this special committee.

This sub-committee has been working actively and has received practically one half of the proposed reports either in final or pre-

liminary form. Inasmuch as nearly all of these contributions are of scientific character, it will not be necessary for them to be presented at the November Conference except possibly in abstract or summarized form.

BASIC SCIENCES IN RELATION TO PROBLEMS OF EMBRYONIC, FETAL, NEWLY-BORN AND MATERNAL LIFE

This sub-committee consists of men prominent in the field of the various fundamental sciences, who are preparing papers on important phases of their specialties insofar as they affect maternity. The fields include:

(a) Anatomy and Embryology; (b) Pathology; (c) Physiology, Biochemistry (Chemistry and Nutrition); (d) Bacteriology, Serology, Immunology; (e) Pharmacology; (f) Eugenics; and (g) Biophysics.

The scope of this committee is so broad that it is impossible to plan anything other than a highly selective program which must be left largely to the discretion, partly to the interest, and to the capabilities of the individual committee member, because no one is catholic enough in his interests to cover all of them. We have taken as our pattern the plan adopted by Section I, Committee A, that is, to have a series of essays which will summarize the present conditions and outline what should be promising fields of attack.

Consideration has been given to educational problems in connection with the proper coordination of the teaching of the basic sciences and the clinic subjects, and it is blocking out further problems and fields for research which can be suggested by the White House Conference as worthy of support.

The reports will practically all be of a scientific character. It is not necessary to enumerate them at this time in detail but it may be desirable to mention those which have already been received:

(1) The application of nutrition to maternal and fetal problems; (2) the effect of dietary deficiencies upon the development of the embryo and fetus; (3) diet in relation to the development of the bony pelvis of the adult woman; and (4) factors involved in a deficient maternal milk supply.

The Application of Nutrition to Maternal and Fetal Problems

This report covers the following material:

An adequate nutritional program, to meet the notable demands made on the maternal organism during the reproductive cycle, i.e., pregnancy and lactation and even during the preceding years, is of utmost importance. Comparatively little scientific research has been conducted in this field and there is great need of further study of the metabolism of women during the reproductive cycle.

Briefly, the dietary requirements, for human reproduction, are an intake of from 1500–3000 calories to meet energy demands and to compensate for the output of food substances during lactation. An ample and varied protein food is needed to meet the demands of the mother and the rapidly growing fetus and to provide the protein constituents of breast milk (estimated to be 25–50 grams or more during pregnancy, with an additional allowance of 50–100 grams during lactation). It is necessary to have a liberal supply of minerals, particularly calcium, phosphorus, magnesium and iron, to prevent harmful drainage of the maternal supply, to provide for the heavy requirements of the fetus, and during lactation to maintain an amount sufficient to prevent inadequate mineral supply for the breast milk, as well as a maintenance supply for the mother. A liberal vitamin allowance is required to meet the needs of the maternal organism, to provide for proper development of the child during its intra-uterine life and assure a supply ample for the production of breast milk high in vitamins, particularly vitamin B, which is most essential during lactation.

Effect of Dietary Deficiencies upon the Development of the Embryo and Fetus

The effect of maternal diets upon the size and weight of the offspring is not fully decided. Starvation of the mother may produce abortion or fetal absorption, death, or diminution in size. There is doubt as to whether the fetal growth can be checked unless the maternal diet is deficient and there is little evidence to show that a deficiency in protein, fat or carbohydrate primarily affects embryonic or fetal development and growth.

Calcium has been studied more than other minerals; a deficiency produces intra-uterine death and may cause dental caries, osteo-

malacia, tetany, spasmophilia, hyperemesis, asthma and hypertension in the mother and produce fetal death and osseous dystrophies.

VITAMIN DEFICIENCIES

Lack of vitamin A may cause sterility, organ defects and diminished resistance to infection. Vitamin B is important for its effect on general metabolism and upon reproduction through its action on the ovary. Vitamin C is of value and if there is marked deprivation, abortion may result or a greatly debilitated fetus may be born, perhaps with evidence of scurvy. It is suggested that the absence of vitamin C may produce osteogenesis imperfecta. Vitamin D may have some influence on fetal rickets, but it is not certain that this disease can be produced or prevented by the maternal diet. The susceptibility may be lessened by an adequate supply. Vitamin E, when deficient, does not affect the mother deleteriously. Pregnancies occur, but the fetus dies in utero from a deficiency. It is doubtful if a deficiency of E plays much of a rôle in fetal death in the human, as it is so widely distributed.

Irradiation may produce a "provitamin" substance in the skin of the living body and in foods outside the body. This may explain the value of sunshine.

Some consider osteomalacia as essentially a rachitic disorder arising in adult life but in many cases it seems to be a different disorder resulting from multiple dietary deficiencies. The skeleton is resistant to simple inanition, but softening may occur in chronic starvation and in dietary deficiency of minerals, of protein and of vitamin A. Other bone softening conditions occur, as in scurvy (vitamin C deficiency) and ostitis fibrosa. These are of relatively slight importance as compared to rickets.

The prevention of rickets is of great general importance, but also has special obstetric importance in the prevention of pelvic deformities and the growth of individuals susceptible to disease conditions and infection. The preventive measures are hygienic, with plenty of sunshine and proper food with vitamin D content, which is provided by egg yolk, cod-liver oil and possibly by irradiated foods. The necessary minerals must be provided. The same measures may be effective in controlling osteomalacia. It should be possible to eliminate obstetric complications due to these types of deformed pelves.

Diet in Relation to the Development of the Bony Pelvis of the Adult Woman

Frequency of contracted pelves, as reported from different clinics and countries, varies from 8 to 24 per cent. Burgess, in Montreal, gives 14.7 per cent, about one-fourth of which required operative deliveries. Williams found 7.7 per cent among white and 33.2 per cent among negro women. DeLee states that dystocia due to contracted pelves occurs in 3 to 5 per cent of cases.

ETIOLOGY OF CONTRACTED PELVES

Some are due to hereditary or germ defects, others arise from developmental disturbance in joints or parts adjacent to the pelvis. Rickets is an important factor. Williams found evidence of rickets in 8 per cent of white and 32 per cent of negro women with abnormal pelves. Tarnier and Budin believed that 15 of 16 deformed pelves were due to rickets.

PELVIC DEFORMITIES IN RICKETS OF INFANCY AND CHILDHOOD

The extent of the deformity varies with the age of the infant and the severity of rickets. Various types result, from the flat to the cordiform and osteomalacic type. Information has been obtained from necropsy material, measurements in vivo and roentgen-ray pictures. Morphogenesis of rachitic deformities of the pelvis is of interest and the mechanical effect of body weight on the softened pelvis is important. Other factors are muscular tension, unequal growth of bones, and disturbed growth due to rickets. Early pelvic deformities tend to persist into adult life, even though there is a tendency to correct the rachitic skeletal deformities occurring in early life. It seems probable that a large percentage of female pelvic deformities can be ascribed to rickets.

THE ETIOLOGY OF RICKETS

This seems fairly clear. It is a metabolic disturbance of complex nature involving the process of calcification in general and of ossification in particular. The most important factors are: (1) A regulatory internal secretion of the parathyroid glands; (2) the presence of calcium and phosphorus in proper form, amount and proportions; and (3) the presence of an antirachitic factor (vitamin D) in the food or other intake.

Factors Involved in a Deficient Maternal Milk Supply

During the period of preparation for lactation there are five main factors involved: the care of the breasts, the environment, the will to nurse, the diet, and the obstacles to nursing.

Special care of the breasts, during the entire prenatal period, according to the principles laid down in the rules for the hygiene of pregnancy, is essential to the production of sufficient milk for the offspring.

The proper psychological attitude of the mother toward nursing her offspring, arising from the knowledge that it is the inalienable right of every mother to nurse her baby and that the mother is the source of the best known food for the child, should be created in the mother by her physician.

It is necessary, in order to create a sufficient milk supply, that the mother receive, during pregnancy as well as lactation, a diet which is ample in essential foodstuffs, mineral, vitamins and fluid. The rôle of high protein and vitamin B in the diet is particularly emphasized. No agreement has been reached concerning the efficacy as galactogogues of the various extracts and phosphates. An appeal is made for more scientific research in this important field, which has received so little attention.

A preliminary report has been submitted on physiology in its relation to maternity. A tentative report on the endocrines in relation to maternity has also been presented.

Reports of the liaison committees on Communicable Diseases and Prenatal Care will have to be a matter of agreement between representatives of the members of the committees involved, and they are not yet available in their entirety to the chairman for presentation in this report.

C. COMMITTEE ON MEDICAL CARE FOR CHILDREN

THIS statement of the work of the Committee on Medical Care for Children must be considered as only an interim report—a report of progress. The amount of material collected is so extensive, and the field investigated so wide, it has been impossible to present an analysis, or conclusions and recommendations at this time.

The committee has undertaken to obtain information as far as is possible concerning:

1. The present status of the health and well being of the children of the United States as far as it is influenced by conditions and activities which are primarily of a medical nature.
2. What is being done by individuals and organizations for promoting the health of children insofar as those activities are primarily of a medical or semi-medical character.

A great deal of material has been secured. It is being analyzed, tabulated, and is ready for study by the groups to whom the material will be submitted. Much of it already has been so studied, and the reports thereon and recommendations as to "what ought to be done and how" have been drawn up and are being discussed.

Many aspects of the subject are of a nature which belonged to special groups, e.g., Psychiatry, Orthopedics, Dentistry, Nursing, Medical Social Service, and Nutrition Work, and these subjects have been handled by special committees. Their work, and their investigations, however, have all been made to fit in with the general plan of the committee.

The rest of the investigation and report has been planned by special groups of the committee whose interest and experience has been greatest along these lines. Their work will be reported on briefly under the head of "General Work," while that of the special groups will be discussed under the appropriate headings.

A brief outline of a report on "The Status of Child Health in the United States as revealed by Mortality Statistics" is also presented by the Committee on Mortality Statistics. This represents but a small part of the material which will be presented in the final report.

General Work

Information has already been secured from the following sources and is still coming in:

> 59 Pediatric Departments of Schools of Medicine; 43 State Medical Societies; 46 State Departments of Health; 27 Extension Divisions of State Universities; 360 Full-time County Health Officers; 2389 Pediatricians and those specially interested in Pediatrics; 490 Physicians in general practice in communities of 50,000 or less and graduating in 1915 and 1920; 1359 Superintendents of Hospitals; 950 Pediatric Services of Hospitals; 406 Pediatric Services of Dispensaries; 94 Convalescent Hospitals or Homes; 265 Social Service Departments in Hospitals; 900 Health Centers; American Medical Association; American Hospital Association; American Red Cross; The Children's Bureau; Other organizations and individuals.

From these sources, information on many different subjects has been secured and some of the most important can be commented on, briefly, in this report.

Medical Education

All but four of the schools of medicine giving a four-year course, and recognized by the American Medical Association, have sent in information concerning the proportion of the general curriculum given over to Pediatrics; the relative stress laid on Prevention and Preventive Measures, compared with the diagnosis and treatment of disease; the amount of instruction, theoretical and practical, given regarding well children.

There is a tremendous variation in the time given to Pediatrics as compared with other branches of medicine, the organization and facilities for teaching it, and the scope of that instruction.

All this information leads to the belief that there is need for a very careful consideration of the possibilities of graduating physicians better equipped to advise concerning the health of children.

This belief is strengthened by the replies from the groups of physicians mentioned (about 3000) concerning their estimate of their education in Pediatrics, "in the light of present experience." This matter is receiving very careful consideration by a group connected with Pediatric Education.

The facilities for postgraduate instruction in Pediatrics, and the demand for it have been investigated. There is a demand for

it, and there may be need for more facilities. Such instruction is given by some schools, usually located in large cities and centers of medical activity and research. But there are many who cannot leave their practice and give up the time for such work. To meet this situation the extension divisions of state universities in some States have organized services which carry this instruction to places most convenient for those desiring to take advantage of it. They are so arranged as to interfere as little as possible with the daily demands on the practitioner. In most cases the State or county medical society takes part in the plan, and sometimes also the State Department of Health. In a few cases the latter groups have carried out the plan alone.

The extent of the demand, the advantages of various methods and the best means for meeting needs require, and are receiving, very careful attention from a group of the committee.

Preventive Measures

There are three measures of a preventive nature which are generally recognized as of proven value. Periodic health examinations of children, vaccination against smallpox, and immunization against diphtheria.

All information concerning the extent to which these measures have been carried out has been sought from all possible sources and a preliminary (and incomplete) statement of results is interesting.

Health Examinations

In private practice it was found that among those specializing in, or particularly interested in, pediatrics that health examinations were made on children in proportions varying according to the age of the child. Among babies under a year the majority did it regularly. During the second year most did it on about half the children under their care. In children of pre-school and school age "very few" were examined.

The attitude of parents toward these examinations was reported as corresponding to the frequency of examinations in a general way, nearly all being favorable for infants under one, about half for those from one to two years of age, and very few during pre-school and school age. The reasons given for most of the failure for more general examination are "Cost" or "Parents think unnecessary."

Among the general practitioners by far the majority reported that parents were unfavorable to this procedure.

It would seem as if more education on the needs of health examinations of children was needed.

Vaccination against Smallpox

There is a fairly general agreement among the physicians answering as to the advisability of vaccination against smallpox, only 0.2 per cent of those answering being opposed to it; 55 per cent made a special point of urging vaccination during the first year of life.

The attitude of parents toward having their children vaccinated against smallpox is worthy of thought. Those physicians having special interest in children report in 82 per cent of the cases, "nearly all" are favorable, while the general practitioners report about 60 per cent.

The attitude of parents is interestingly reported by the County Health Officers, who in many cases report lack of interest, or even opposition unless there has been a case in the community.

Immunization against Diphtheria

In regard to immunization against diphtheria the returns are very encouraging. Among those specializing in, or specially interested in, children, 91 per cent report that they urge its being done, while among the general practitioners over 75 per cent do so. The more recent the graduation of the physician, the greater the proportion who urge its being done.

In dispensary practice, in a fairly large per cent of the cases it is specially urged, while 20 per cent report it is only given when asked for, but only one-half of one per cent state they do not believe in it.

Parents are favorable toward having their children immunized against diphtheria in "nearly all" cases in a fairly large percentage of the answers. This reaction varies at different ages, their reaction being most favorable between the ages of one and six years. This attitude is fairly constant in the reports of all three groups of physicians.

In hospital practice the response is not nearly so favorable.

While tremendous headway has been made in general im-

munization of children, there is room for much further education in the value of this procedure.

All groups were asked as to their practice in regard to giving the Schick Test after immunization had been given. It is known, from the experiences of Park and others that a certain proportion do not acquire this immunity with one series of injections,—requiring, therefore, a second course of treatment. While this proportion is small, if the protection of the community is to be thorough, the Schick Test would seem to be indicated. It is important, therefore, to note that 9 per cent of the physicians reporting do not consider it necessary, and 23 per cent give it only when asked, while in 30 per cent of the cases physicians report parents are opposed to this procedure.

The above statements are only a very small amount of the information secured in regard to the whole subject of diphtheria immunization, but as yet it has been impossible to complete the careful study of the returns and make a final report and conclusions.

In order to get still further information as to the extent to which health examinations, vaccination against smallpox, and immunization against diphtheria are given to children before the usual age at which they first begin their school life, an extensive investigation is being made in cities of over 50,000 population and in certain rural areas. At the present time a cross-section survey of families having children under six years of age is being made in over 120 cities, and in rural areas in 38 States. This survey is being made in a uniform manner, and reports from over 100,000 families will be available. At the time of writing this report (October 1) returns from some 52 cities are already in hand. It is too early to draw conclusions but there are very interesting and encouraging indications of the results of campaigns for general immunization against diphtheria, while the extent of lack of immunization among children before reaching school age, for cities as a whole, is food for serious thought.

That health authorities are active in this work is indicated by the fact that almost 92 per cent of the full-time health officers reporting, are carrying on a campaign for diphtheria immunization in their Counties. In many cases a large percentage of the children has been reached.

The final report on the subject of health examinations, vacci-

nation against smallpox and diphtheria immunization will be very detailed and it is hoped very illuminating.

The committee is also attempting to secure as complete data as possible in regard to the facilities provided for the prevention of disease and ill health, as well as the care for sick children in all areas of the country. This will include the hospital facilities for children, the opportunities for convalescent care, the number and distribution of health centers, together with the type of service they are prepared to carry out, and many other details of practical value. This material is in process of tabulation and study and will be available for final report.

Special studies have also been carried out in regard to the Negro and the Indian population. While the results of these studies are not yet available for report, the indications are that there is need for a very careful consideration of future and extended activities among this part of our population.

A special report on conditions in Hawaii, as affecting child health, has been prepared by Prof. Hiscock of the Yale Department of Public Health. These islands, far away from our mainland, and only a part of the United States since 1900, have developed a program, public and private, for the health and well-being of children, which is worthy of careful study. This report will be presented in detail later.

PSYCHOLOGY AND PSYCHIATRY

The sub-committee making this study has limited its investigations to those aspects of psychiatry and psychology which are of interest to the physician dealing with individual children. Other committees of this conference are reporting upon the fields of education, delinquency and dependency.

Upon certain points we find a general agreement among most people who are interested in the application of scientific information in the general field of psychiatry and psychology to the management of individual children in difficulty.

In the first place, the well-informed parent is not satisfied with off-hand advice when children are in emotional or intellectual difficulties. We all agree that there is a good deal of superficial interest in these subjects, fostered by superficial talking and writing. We also recognize that carefully conducted efforts at the dissemina-

tion of valid mental hygiene information can be seriously misunderstood. However, entirely aside from a decision upon the merits of the methods by which interest has been aroused, we regard the curiosity of intelligent parents as an existing fact which must be considered.

In general, we believe that worried parents and teachers first seek advice from practitioners of medicine. We are very much concerned at the fact, which we reluctantly admit, that many doctors are entirely unwilling to consider the questions presented with any seriousness. Two unfortunate results follow this attitude. In the first place the child may suffer as a result of unwarranted hopes that time will straighten out its difficulties; in the second place a more eager group of non-medically trained individuals may replace the doctor as the natural advisor of parents having problems to deal with.

Entirely aside from questions of professional prestige it is obvious that such a situation will diminish the interest of medical practice and lead to a complication in the supervision of children.

We believe that the present disturbing situation can be greatly modified for the better. The measures to be taken depend upon a reasonably clear view of the present activities of various interested groups.

Division of Field

This sub-committee has accepted the task of advising doctors in general as to their opportunities and their duties in regard to psychiatry and psychology. The preliminary definition of these two terms presents difficulties. We are willing to divide the field into two parts. In one, psychiatry, which we regard as an essentially medical field, we include those problems which are the result of individual difficulties. We believe that, on the whole the medical point of view should prevail here. We are not prepared, in a brief report, to set definite limits to this field beyond suggesting that individual distress and its relief is the typical psychiatric problem.

On the other hand, we regard the field of psychology as one which has to do with general trends and one which is naturally concerned with matters of education of groups of children. We recognize that a therapeutic interest in individuals may lead any individual psychologist into the field which is more often occupied by psychiatrists.

We further recognize the very obvious fact that all sorts of people have brought up all sorts of children successfully. We have no reason to suppose that informal and successful management will not be common in the future, as in the past. Neither are we at all convinced that it would be completely fortunate if all children could be spared misunderstanding and suffering.

We are, however, reasonably familiar with the types of distress suffered by a great many children under present conditions of living. Many children who might be leading happy lives while they are receiving adequate education are wretchedly pursuing a badly planned educational routine. Only an incorrigible optimist can regard the present situation as satisfactory.

Difficulties Caused by Propaganda

The members of this committee have all taken some part in the attempt to interpret the contributions of psychiatry and psychology to medicine and to education. We can, therefore, with appropriateness call attention to certain difficulties which have been created by propaganda.

It is very generally recognized that the study of the insane, of the feeble-minded, and of the convicted criminal has revealed facts which lead to hope of definite improvement by early and effective preventive measures. The analogy between mental disease and physical disease has been stressed. Optimists have jumped various logical obstacles and have reached the conclusion that proper management of children will prevent, on a grand scale, the development of insanity, feeble-mindedness, and crime. We have no desire to base our appeal for cooperation on any such claim. We are prepared to defend the proposition that many children can be educated more effectively and that this education can be conducted more happily if certain relatively simple measures are taken by parents, doctors, and teachers. We believe that certain attitudes of mind which lead to great unhappiness in adult life can be modified. We are willing to leave the question of the major disabilities which lead to complete social bankruptcy to experts working slowly and thoughtfully with individuals.

Efforts in the Field

We have surveyed the present efforts in the field of "mental hygiene" or "child guidance" with great interest. Without going

into details it is probable that organized clinics can never cover the whole field satisfactorily. Figures are being collected and efforts are being made to grade these various clinics by highly qualified experts under other auspices. The results of their study will probably be available before our final report. In 1928 a survey by the National Committee for Mental Hygiene showed 355 clinics staffed by 529 psychiatrists, 300 psychologists, and 344 social workers who cared for 44,296 children. Obviously these figures are far from showing, in any detailed way, the true situation. However, it is reasonably clear that the clinic method is expensive in time and money and reaches relatively few children. Moreover, we are entirely conscious of the fact that the clinic alone solves relatively few cases. Some highly organized groups disown therapy. They regard themselves as diagnosticians for social agencies to whom treatment is delegated. In all cases the intelligent cooperation of many other people is entirely essential. Since no one proposes that the clinic groups alone can completely solve the problems referred to them, it seems clear that a large number of people must absorb and utilize what knowledge and technique is available to them.

Problems and Suggestions

The practitioner of medicine who attempts to extend his practice beyond the most mechanical details of physical medicine is necessarily involved. The effectiveness and the dignity of his position depends upon his willingness to find a way of adapting the technique and the attitude of the expert to his own needs. It is quite clear that the practitioner who has been in active practice for many years cannot master all the details with which the experts are familiar. It is also probable that his routine timetable cannot be arranged to leave him time for the accurate study of a large number of cases. To such men we make this suggestion: The question of whether a child is developing steadily and happily towards an apparently adequate goal and is helped along by parents and teachers who are dealing sensibly with the shifting problems which occur at various ages can be answered, with a fair degree of accuracy, after relatively simple and informal methods of investigation have been carried out. When difficulties arise he can easily find out a method of getting more fully informed help.

As we have previously pointed out analogies with physical disease are dangerous, but the situation is not unlike that which faces a doctor who has to consider the possibility of brain tumor. If he thinks of the possibility he is halfway to a diagnosis; if he knows how to use an ophthalmoscope he can tell an entirely normal eyeground from a grossly abnormal one. The fact that he is neither an ophthalmologist nor a neurological surgeon does not prevent his patient from receiving adequate and timely treatment. We believe that an intelligent curiosity will lead to effective use of consultants. The effort at wise selection of cases will inevitably lead to profitable discussion with experts or study of relevant literature. The definition of interests and opportunity will naturally follow. We believe that the organized clinic has a distinct duty in clarifying the situation to doctors who cooperate.

To younger doctors, particularly to pediatricians, various methods are available. We are acutely conscious of the fact that psychiatrists have made many mistakes in their attempt to show medical men in general the way to achieve psychiatric intelligence. They have often overemphasized technique. All we can say is that they are trying to find better ways and that they believe that general practitioners are so necessary as colleagues that they will continue to devise new methods of enlisting their aid.

One further suggestion is in order. It is entirely in order to reverse the method of instruction. If the information presented by psychiatrists and psychologists does not appeal to the physician, he is well within his rights in selecting other leaders or even in making independent investigation without leadership. It is fair to emphasize that most psychiatrists agree on a certain number of general principles. Most psychologists accept a certain number of ideas as beyond question. Other things being equal we think it would save time to start at some such base line. When it comes to further procedure we recognize the divergence of views and see no particular value in discussing relative merits.

We feel justified in pointing out that this sub-committee's field is as extensive as that of any major branch of medicine and that much of the knowledge is so new that its application to children is not clear. We are confident that progress has been made. We understand some of the difficulties which face the interested practitioner. In this preliminary report we are unable to go into details, but we will attempt to define issues and suggest solutions later.

BODY MECHANICS ("POSTURE")

The investigations concerning Body Mechanics ("Posture") have been carried on by a special sub-committee which set itself the task of:

1. Collecting and analyzing available statistics as to the incidence of bad body mechanics in children.
2. What is being taught about Body Mechanics in:
   Schools of Medicine.
   Schools of Physical Education.
3. What practical work is being done by:
   Physicians in their private practice.
   Hospitals and Dispensaries.
   Health Centers.
   Public and Private Schools.

Up to the time of preparing this report, information has been received from professors of orthopedics in 47 schools of medicine, 169 schools of physical education, 921 physicians limiting their practice to, or specially interested in, pediatrics, and 603 hospitals and dispensaries.

Material concerning the incidence of poor body mechanics ("Posture") in children is not extensive, but some valuable facts have been obtained. These are being carefully studied and will be reported upon in some detail later. It is not possible at this time to do more than say that the evidence at hand indicates that bad conditions are very prevalent.

In the 47 medical schools reporting, the subject is taught in 75 per cent. Instruction is rather scanty and often merely incidental. Although only 75 per cent of the schools give this instruction, 92 per cent feel that it should be given, and 79 per cent feel it should be a course required of all students.

In the schools of physical education instruction in the Theory and Practical Application of Body Mechanics, or "Posture," in its relation to the health of the individual, and distinguished from so-called "calisthenics," is reported as being given in 82 per cent. The amount of time given to this subject, and the character of the instruction is for the most part rather vague.

Among the physicians questioned, 67 per cent "always," and 27 per cent "usually" investigated the subject in their examination of children. Of those who answered, 50 per cent felt able themselves to give instruction as to correction of bad body me-

chanics, and 50 per cent did not. That there is a real need for such work in promoting the health of children was felt by 95 per cent of these physicians.

In the hospitals and dispensaries only 37 per cent conducted clinics for the correction of faulty body mechanics. Of those who did, 51 per cent held three or more clinics a week. It is interesting to note that of those who did not hold special clinics for this purpose, 41 per cent felt there was "considerable" or "great" need for them.

Information from health centers, and from public and private schools is as yet too meagre to report upon.

All information in this subject is hard to obtain and needs careful study, but the committee will be ready very soon to give a full report and make definite recommendations.

DENTISTRY AND ORAL HYGIENE

Questionnaires have been sent to every State dental society and to many health organizations. From these centers we have been referred to schools and institutions where dental examinations have been conducted. The total number of questionnaires sent out to such sources approximates 1525. Reports from which a fair idea of existing dental conditions may be obtained number 105.

The percentage of defective teeth is variously estimated as from 66 per cent to 98 per cent. Since these figures have been gathered from many sources and the method of recording them varies, we can only say that dental defects are very common and that caries appears to exist to the extent of about 95 per cent among the children of today.

Further, a rough estimate of the percentage of maxillary deformities with irregular teeth appears to be around 85 per cent. Disturbances around the roots of teeth are indicated in approximately 75 per cent of the cases reported.

Repair of the defective teeth, removal of septic teeth and periodic tooth cleaning movements are relied on as remedial measures, while the correction of tooth position is carried on by orthodontic procedures.

In some few instances carefully controlled dietetic measures have been undertaken for the arrest of caries and for its prevention with notable results.

The extent of dental disorders indicates that an extension of

reparative and hygienic measures is needed. Yet the continuous process of caries in spite of these measures indicates strongly that further study of underlying causes is of still greater importance. Laboratory study and clinical experience indicate that these lie within the field of mineral metabolism as regulated by dietetic control.

The final study and analysis of the material collected is not as yet completed.

NURSING

A special sub-committee on nursing has been carrying on a detailed and extensive study of the character and extent of instruction of trained nurses in the care of sick children, and their preparation for preventive work. As in the case of medical education, the investigation has been carried out along broad lines, and includes what can be learned as to the efficiency of that education, undergraduate and postgraduate, as well as its extent. Information has been received from 550 accredited schools of nursing, 9 public health nursing courses, 308 public health nursing agencies in cities, 33 supervisors of public health nursing services in rural districts, 203 public health nurses working alone in rural districts, and 2840 physicians. This material is being carefully studied. There is a great variation in the amount of instruction and practical work done by student nurses in various hospitals. Theoretical instruction varies from 4 to 100 hours, the average being 28.6 hours, while practical training also averages the same, 28.6 hours.

In addition to these 550 schools of nursing, 450 give no instruction in pediatric nursing at their institutions, but send their student nurses to other hospitals for this instruction through affiliation.

On the whole, there is little opportunity offered in the schools of nursing for practical experience with "well" children, and the educational and psychological aspects of child care are given no place, or very little, in courses for nurses.

The information secured from 9 postgraduate courses in public health nursing indicates that preparation in the fields of mental development of normal children, child training, physical development of normal children, and health teaching is better provided for in postgraduate courses for public health nurses than in schools of nursing.

Further information as to the adequacy of training of nurses who do public health work is given by the heads of public health nursing staffs in cities (308). Only 39 per cent felt that "nearly all" of their staff were adequately prepared, while 30 per cent reported that "none," or "very few," was. The four "lacks" most frequently noted in order of their frequency were: (1) Lack of knowledge and experience in mental development of normal children; (2) lack of understanding of fundamental principles of child training; (3) lack of training and experience of the physical development of normal children; and (4) lack of teaching ability.

An educational program for staff nurses is conducted by 49 per cent of nursing organizations reporting.

These are but a few of the facts brought out in this study. Incidentally they merely bear out the experience of those who know most of conditions in the nursing world.

The committee is carefully considering these facts and will be prepared later to make definite recommendations.

MEDICAL SOCIAL SERVICE

The investigation of medical social service has been in the hands of a special committee. Information of a detailed nature concerning this service has been sought from every hospital known, or thought, to have one. To the time of preparing this statement, 256 which receive children have sent in information.

Medical social service has been a part of hospital practice for 25 years. The committee has sought to investigate the extent of medical social service in hospitals, the special services rendered, its organization, its relation to the community, the personnel carrying on the work, and the facilities for training that personnel. The study is far from complete. It is estimated that there are about 500 social service departments in the hospitals and dispensaries of the country.

From the information obtained, about half of these departments are in hospitals of from 100 to 250 beds, and about one-quarter in those from 250 to 500 beds.

Of the hospitals reporting, in 89 per cent the social service department is officially a part of the hospital organization. In the rest there is divided responsibility which often seems to cause considerable difficulty. The organization and support of medical

social service is one of the big problems this committee is studying and attempting to suggest "what ought to be done."

There is a very large proportion of the hospitals of the country without this service as part of their organization, although the American Hospital Association, and the American College of Surgeons have officially recognized it as essential to the modern hospital with adequate standards of service to the patients and community. There are nearly 1800 hospitals of 100 beds or over listed by the American Medical Association.

That the social service department is taking an active part in the community relations of the hospital is shown by the fact that 60 per cent have worked out a definite policy of cooperation and coordination with public health nursing organizations.

There is a marked variation in the adequacy of the staff in various hospitals, in the opinion of the departments reporting. Only 28 per cent considered they had an adequate staff, 23 per cent a wholly inadequate staff, and 43 per cent a barely adequate one.

The facilities for training for medical social service are limited. There are 9 institutions, schools of social work, and universities offering special training for this work. The American Association of Hospital Social Workers has an educational secretary, who acts as advisor to these training centers. And yet from the returns already received, it is known that there are over 1400 medical social service workers in hospitals. There are many more not yet heard from.

This aspect of the medical care for children requires much study and consideration in drawing conclusions and making suggestions as to improvement in the service it can render.

NUTRITION

The Sub-committee on Nutrition has attempted to find out: (1) What is being done by nutritionists in the field of child health and protection; (2) what are the training facilities for nutritionists; and (3) what training those actively engaged in this work have had.

This information has been sought in order to obtain a suitable background for possible recommendations as to "what ought to be done and how."

Much is being done for the nutrition and health of children by a wide variety of professional and non-professional people inter-

ested in child health and protection. This study is limited to the contributions made by a small, but rapidly growing professional group, consisting of those workers who have been trained in nutrition with special emphasis on the relation of food to growth, development, and well being; on the nature, selection and preparation of food; on methods of presenting these facts to individuals and groups; and on those whose major activities are directed toward the furtherance of good nutrition in public health and community welfare through education.

Individuals with this training and doing this sort of work are variously spoken of as nutritionists, dietitians, and home economists. For the sake of a common term, however, "nutritionist" is used throughout this report to include all such workers.

Sources of Information

Through the members of the American Dietetic Association, the American Home Economics Association, the National Conference of Social Work, the State Extension Workers, and other national, State, and city organizations, also by means of much correspondence, a list has been obtained, exclusive of schools and child-caring agencies, of 195 agencies and organizations employing nutritionists. These may be classified as follows:

American Red Cross	1
Boards of Health (State and city)	5
Clinics, dispensaries, hospitals and dental centers	31
Commercial Organizations	59
Extension Service, U. S. Department of Agriculture, and State Agricultural Colleges cooperating	1
National health organizations	2
Public and private health and welfare agencies, including health centers	96
	195

Nutritionists in schools make a direct and important contribution to the nutrition of children, but as this phase of child health work was to be covered by a sub-committee of the Committee on the Education and Training of the School Child, this committee made no survey of the work of the ever-increasing number of nutritionists in the schools. Also questions covering the nutrition service in child-caring institutions were included on the questionnaires sent to these agencies by another committee, and no attempt

was made to ascertain the number or work of nutritionists in these organizations.

Findings

A carefully prepared questionnaire was sent to the agencies and organizations on this list. Replies numbering 122 were received, reporting 273 individual workers, exclusive of those in commercial firms. Sixty-one of these workers are financed by public funds.

According to the seven United States Census Divisions, these nutritionists are located as follows:

I North Atlantic Division	46
II Middle Atlantic Division	62
III South Atlantic Division	28
IV North Central Division	92
V South Central Division	25
VI Mountain Division	8
VII Pacific Division	12
	273

In addition to the figures given above 30 commercial firms, from which replies were received, report a total of 108 workers who are engaged in work which influences the nutrition of children. Since their work is, for the most part, national in scope, nutritionists in commercial concerns are not included in the above groupings.

Work Done

The type of service rendered by these workers is very varied. It includes: (1) Promotion and general educational work; (2) organization and executive work; (3) actual instruction, supervision and consultation; and (4) direct services to individuals and families in their homes, in clinics, institutions and summer camps.

The work is done in both urban and rural areas, in connection with health departments, departments of education, dispensaries, hospitals, national health organizations, and public or private health or welfare agencies.

Through intensive instruction, nutritionists in public health, community welfare, governmental and semi-governmental agencies have reached during the past year approximately:

Sixty-five thousand to 75,000 infants and pre-school children;

270,000 to 280,000 school children; and 90,000 to 100,000 mothers of young children.

Commercial firms are taking a hand in distributing literature on nutrition. Last year 25 firms sent out 13,000,000 pieces of literature, some of which had been approved by leaders in the nutrition field. Fourteen of the commercial concerns report a total of over $1,000,000 spent last year on literature and advertising material emphasizing nutrition in child health.

Training

Reports were received from 73 of the largest and best home economics training schools. The courses seem to adequately cover the subjects of nutrition and allied sciences in the majority of colleges and universities.

Of 391 workers in the field (including the workers in commercial firms) 360 have Bachelors' degrees. In addition 101 have Master's degrees, 4 have the Ph.D., and one has an M.D. degree. Ten failed to answer. About 75 per cent had their training in institutions of high standard.

Of 11 schools listed by the National Organization for Public Health Nursing as offering postgraduate courses in public health nursing, all but one require an average of 15 to 18 hours of instruction in nutrition. This amount of training is fairly adequate for general purposes, provided nurses in the field have access to the services of a trained nutritionist for consultation in individual cases.

On the other hand, of 26 schools of social work, approved by the Association of Schools of Social Work, only 6 require instruction in nutrition or its equivalent. It is recommended as an elective in 6 other schools.

Further details of findings and recommendations will be available in the final report of the committee.

MORTALITY STATISTICS

What is the status of child health in this country as indicated by our mortality statistics? What changes are taking place over the years? Pending the preparation of a report on this subject to be presented later, a brief preliminary statement may be made at this time.

Our best source of information on these questions is the annual reports of mortality statistics published by the Division of Vital Statistics of the Federal Census Bureau. We have no widespread measures of health, and national health must therefore, for the most part, be measured indirectly by the number of deaths and the proportion of deaths at the different age periods.

We cannot go back very far, however, in seeking to compare mortality of the past with the situation today because records are not available. It is only during the last 30 years that we know much about the details of mortality in different parts of the country and only since 1915 that records of infant mortality for large areas are available.

The statistics which we use in studying mortality trends in the United States are limited to what is known as the Registration Areas, which include those parts of the country where there are well-established machinery and regulations to assure a reasonably complete return of the records of births and deaths, where actual checks have indicated that 90 per cent or more of births and deaths are recorded. The Death Registration Area was formed in 1880 with two States, Massachusetts and New Jersey, the District of Columbia, and 19 cities in 16 other States. This represented but 17 per cent of the population of the country. It was not till 1900, however, that annual compilations were made. The Birth Registration Area was formed in 1915 with 10 States and the District of Columbia. The two areas have grown so that in 1930, they include all but two States.

The Significance of Mortality Statistics

The Census Bureau mortality data, while the most reliable source of information we have, must be interpreted in the light of certain limitations in their accuracy which are known to exist. The entries on a death certificate are occasionally incorrect because the physician has been called in at the last minute and is not familiar with the previous history of the case. Changes in classification of causes of death have also taken place over the years. Some causes which are well recognized now were formerly combined in a general grouping with several other causes. Furthermore it must be understood that for statistical purposes deaths must be attributed to a single cause. Deaths due to a complication of causes are attributed to a main cause according to inter-

national rules. For this reason the indicated deaths from pneumonia for instance really do not include all the deaths in which pneumonia has played a part, but only those deaths in which pneumonia takes precedence in the statistical handling over other causes.

Infant Mortality

The infant mortality is expressed as the number of babies dying under one year of age per 1000 babies born alive during the year.

Infant mortality in the United States as represented by the States in the expanding Birth Registration Area shows a very definite improvement since 1915. In that year the rate was 100. In 1929 our rate was 67, which represents a decline of one third.

The rate of the United States compares favorably with the leading powers of the world, being lower than either England, France, Germany, Italy or Japan.

There are countries, however, with lower rates. In 1925, at least 7 countries are known to have an infant mortality lower than our own, namely: New Zealand, Norway, Australia, Sweden, Switzerland, the Netherlands, and the Irish Free State.

It is not possible to present a fair comparison of all countries because the methods of computing the rate are not the same. Some countries do not count as a birth and a death a baby that lives for several days and then dies. They record this as a still-birth. Inasmuch as a fifth of all deaths in the first year of life occur on the first day and two-fifths occur during the first week, it makes a very appreciable difference in the infant mortality rate if these deaths during the first few days are not counted.

Infant Mortality in the States

While the infant mortality rate for the Birth Registration Area in recent years has been around 65, there has been considerable difference in the rates of the individual States. In the five-year period from 1925 to 1929 the State of Oregon had the low rate of 49 followed by 52 for Washington, and 55 each for Iowa, Minnesota and Nebraska. At the other extreme are Maryland with the highest rate 84, followed by Delaware 83, North Carolina 81, Virginia 79, and Maine 77. In general the decline in infant mortality has been almost universal in the States.

The Birth Rate

Our birth rate has shown a decline over the years falling from 25 births per 1000 population in 1915 to 20.6 in 1927. Birth rates have likewise declined in other countries, this decline however being more pronounced in England, Germany, Sweden, and the Netherlands, for instance, than in Italy and Spain. Practically no decline has taken place in Japan and British India. In 1927 our birth rate was about midway among the rates of 27 countries for which records are available.

Infant Mortality among White and Colored Races

Infant mortality among the colored race in this country is about 60 per cent higher than among the white population. The higher infant mortality in Southern States is largely due to the high proportion of colored people among whom the rate is high. If we consider the white rates by themselves and the colored rates by themselves there is little or no difference between Southern States and those Northern States which have large colored populations.

Infant Mortality and Various Nationality Stocks in this Country

It is the babies of mothers born in Russia, mostly Russian Jews, who have the lowest infant mortality rates in this country. In fact babies of mothers born also in Denmark, Norway, Sweden, England, Scotland and Wales, Germany and Italy each have lower death rates than babies of mothers born in this country. Babies of mothers born in Poland, Austria, Hungary, Canada, and Ireland have higher death rates than those of our native-born mothers.

The Chief Causes of Infant Mortality

It is the causes associated with early infancy which are responsible for our heaviest baby mortality. This is true now just as in 1916. The principal reason for the decline in the infant mortality rates over the years has been the great lessening of diarrhea and enteritis. Deaths from this cause declined nearly 70 per cent between 1916 and 1927. The decline in respiratory disorders such as pneumonia, and in the communicable diseases has been about

40 per cent. The death rate from natal and prenatal causes has declined only 20 per cent.

The Age Period of Lowest Death Rate

It is the age group from 10 to 14 years which has the lowest death rate. This was the case in 1900 as well as in 1920. The death rate for the age group under 5 years has declined 40 per cent between these years. The decline in age group 5 to 9 has amounted to about 30 per cent. From 10 to 50 years of age the death rate has declined about 20 per cent.

Changes in Mortality among Children

The fall in the death rate among children under 5 years of age since the beginning of the present century has been due largely to reductions in diarrhea and enteritis, the pneumonias and influenza, bronchitis, diphtheria, scarlet fever, tuberculosis, and meningitis. Deaths from accidents have shown the least tendency to fall and in fact show even an indication of increasing.

In the age group 5 to 9 years, diphtheria was the major cause of death around 1900. In 1920 and the years following, however, diphtheria has fallen to second place as a cause of death giving way to accidents as the major cause. All of the chief causes of death except accidents have declined during this interval.

In 1900 tuberculosis was the chief cause of death among children of 10 to 14 years of age. Today accidents claim the greatest number of victims. Nearly all of the major causes show declines excepting the pneumonias and accidents.

In the age group approaching maturity, from 15 to 19 years, tuberculosis stands first just as it did at the beginning of the century, this in spite of the fact that the tuberculosis death rate among people of this age is only about half what it was then. Deaths from accidents are about the same in frequency at the two periods. Typhoid fever, the third most important cause of death in this age group early in the century, ranked below appendicitis in importance in the years following 1920.

Childhood Mortality in the States

The mortality of people under 20 years of age in the District of Columbia is nearly twice that of this age group in Oregon.

This was true in the years 1919, 1920, and 1921. Whether this relation has been altered more recently we shall not know until the details of the 1930 census are available. Other States with low childhood mortality (under 20 years) are Louisiana, Nebraska, and Minnesota. The highest mortality rates among this age group are in Delaware and Maryland as well as the District of Columbia.

Some of the Public Health Problems Facing the States

To visualize some of the major public health problems of the States as they concern childhood (under 20 years of age) particularly it is necessary to look to the census year 1920 when populations by age groups were known. Our 1930 census details when available will show to what extent the picture has been altered.

Typhoid fever in 1920, among those under 20 years of age, was nearly 20 times as high in South Carolina as in Rhode Island. The 5 States with the highest rates were South Carolina, Kentucky, Tennesee, Mississippi, and Florida.

The sectional picture of typhoid fever is reversed in the case of diphtheria. Michigan, Rhode Island and New York, although low in typhoid prevalence, had the highest rates from diphtheria.

In scarlet fever, Delaware and Wisconsin had the highest rates in 1920, rates 20 or more times that of Louisiana and South Carolina.

The childhood tuberculosis rate in California was four times that of Utah. In general the more populous Northern and Eastern States have higher tuberculosis rates than the States of the Middle West.

The States do not differ so greatly in childhood deaths from accidents, the highest rate being about twice the lowest rate. The States with highest rates were Florida, Rhode Island and California, the highest rate of all being in the District of Columbia.

The relative frequency of deaths from specific causes among children in the different states is not as clearly distinguished as it might be owing to the large number of deaths unclassified as to cause in some of the States having large colored populations. In 1920 for every death under 20 years unclassified as to cause in Indiana there were nearly 70 unclassified as to cause in Mississippi.

Mortality statistics indicate that death rates among our colored population under 20 are very much higher for most causes of death than among the white people. In a group of Southern States in

1920, the death rate from malaria was from three to four times greater among the colored. Pneumonia and influenza among the colored were about double that of the whites. Tuberculosis among the colored was twice as great as among white children under 5, four times as great as among white children 5 to 9, and five times as great as among white young people 10 to 19 years of age.

CONCLUSION

Inasmuch as the Committees of Section I of the White House Conference have been engaged in large part in certain important surveys that have never been made before, it has been deemed advisable to grant them more time in which to complete their studies. In consequence, their reports to the general Conference will not be final. The final statements will probably be presented sometime in February. However, the work is far enough along to offer some definite indications of the conclusions that the final report will contain.

SECTION II

PUBLIC HEALTH SERVICE AND ADMINISTRATION

A. COMMITTEE ON PUBLIC HEALTH ORGANIZATION

The Committee on Public Health Organization has had for its purpose the study of basic public health organization, as it is related to the several elements of government as well as to private agencies, with a view of determining such modifications and readjustments as would result in a type of public health organization which could best apply existing knowledge for the protection and promotion of the public health.

Scope and Purpose of Committee

The committee held its first meeting on November 7, 1929 in the office of the Secretary of the Interior at which time it formulated its declaration of principles and guiding policies for the study. Shortly thereafter sub-committees were appointed as study groups to deal with the following subjects: Federal Health Organization, State Health Organization, City Health Organization, Rural Health Organization, Relation of Official and Non-official Agencies in Public Health Organizations, Instruction of Medical Students and the Training of Health Personnel, The Administration of Child Health Work as a Part of the Official Health Program, Practitioners of Medicine and Dentistry in Relation to Health Progress.

A sub-committee on "Public Health Aspects of Food Control" was organized at a later date. The findings and recommendations will be available in the near future and will be incorporated in the final report.

Intensive studies were engaged in by the several groups and on October 11, 1930 the second general meeting was called for receiving and acting on the preliminary reports of the several study groups. The summary report herewith presented contains in preliminary form the reports of the sub-committees as amended and approved by the committee as a whole. The findings and recommendations of each sub-committee appear as separate entities in order to show the problems and interrelationship of the several administrative units entering into the whole scheme of health organization. The final report will present in more detail the

supporting data for the recommendations herein contained and will coordinate the recommendations of the several sub-committees.

Declaration of Principles and Policies

1. The organized promotion of child health in the future will depend as it has in the past upon the quality of trained professional leadership for, and the organization and financial support of, full-time administrative health services provided to benefit all the persons old and young, and of both sexes, in each community in our nation.

2. The health interests of the child as an individual, and as a member of the family, and of the community, are inseparable from those of adults, both men and women.

3. Public health organization throughout the world, and in particular in the States, counties and municipalities of this country, has recognized the wisdom of including its administrative resources for health under one direction and for a common purpose, whatever be the particular problem of preventive medicine uppermost in the public mind at the present moment, or however great the immediate needs of a limited age or sex group in the community for which additional efforts or resources are required.

4. The problems of health protection of the child show in common with those of the adult a great complexity of origins, consequently it is only through a centralized authority, trained in the medical and biological sciences and with understanding of the fields of economics and sociology, that we may expect to obtain comprehensive and enduring results.

5. No public health organization, federal, state or local which lacks provision of expert, specially trained direction for child health can be considered adequate for the needs of American families today.

6. The committee believes that the best health service to the child is to be accomplished by inclusion of child health within a program of general health service applicable according to age and condition to all members of the community.

7. The services which government should provide for the children of the nation fall logically for purposes of administration into three groups: (a) Health, (b) Education, (c) Social Welfare.

8. It is desirable for the federal government to develop and extend its interest in the health of children and of the population

as a whole. Methods by which it can constitutionally promote the public health include:

(a) Studies and investigation for purposes of extending scientific information and perfecting more effective methods for application of present knowledge for the prevention and control of disease.
(b) The perfection and extension of facilities for disseminating scientific information concerning the prevention and control of disease.
(c) Professional advice and assistance to communities and States by competent experts in the several special phases of public health.
(d) Financial assistance in the further development of efficient local and state health services; this assistance having for its primary object the stimulation of a larger sense of local responsibility for public health and the provision of inspiration and example for a higher grade and more adequate volume of health work appropriate to local needs.

9. The principle of federal aid for many community activities has been accepted as a governmental policy under various acts of Congress over a period of a generation. In no phase of community welfare is there a greater need for federal assistance than in public health.

FEDERAL HEALTH ORGANIZATION

The Present Status of the United States Federal Health Activities

(July 1, 1930)

The health functions of the federal government are performed under powers delegated by the several States to the Government.

While many governmental activities influence more or less the health of the people, many of them have but an indirect bearing upon and were authorized without reference to health protection. Nowhere in the Constitution is there express delegation of public health powers, which are therefore exercised under constitutional provisions relating to (1) the regulation of commerce, (2) the levying of taxes, (3) the promotion of the general welfare, (4) the making of treaties, and (5) the supervision of federal territory and reservations. The preamble to the Constitution which states that one of the objects to be accomplished is the promotion of the general welfare is declaratory in nature and not of legal effect.

The police power relating to health, safety, and morals within state borders, on the other hand, has been specifically reserved to the States themselves. There is a diversity of competent opinion as to the relative applicability of the several constitutional powers to federal health activities, and in the absence of judicial decisions there is difficulty in determining in all instances the specific constitutional authority under which a particular law has been enacted.

The federal health activities which are of sufficient significance to be considered in this report are conducted in six governmental departments: viz., Treasury, Agriculture, Labor, Commerce, Interior and State.

For instance, while the State Department drafts and handles international sanitary treaties and collects public health statistics, it is a minor function of that department conducted in cooperation with the U. S. Public Service.

The bulk of all federal health activities are conducted by the U. S. Public Health Service. By name and by law this is its major function.

It is recognized that certain other federal laws such as those dealing with the purity of food and drugs, the control of bovine tuberculosis, etc., under the Department of Agriculture primarily serve economic interests and prevent commercial fraud, although they contribute to health.

The public health agencies and functions of the federal government authorized by law are presented as follows:

Federal Health Functions According to Departments, Bureaus and Divisions

TREASURY DEPARTMENT

United States Public Health Service—

1. Investigations of diseases of man.
2. Investigations of matters pertaining to the public health.
   (a) Child hygiene.
   (b) Industrial hygiene.
   (c) General sanitation.
   (d) School hygiene.
   (e) Heating, lighting and ventilation.
   (f) Milk in relation to health.
3. Investigations of mental hygiene, including habit-forming drugs and drug addiction.

4. Investigations of water supplies and sewage.
   (a) Pollution of streams.
   (b) Human wastes.
   (c) Industrial wastes.
5. Demonstrations of sanitary methods and appliances.
   (a) Rural sanitation.
6. Control of venereal diseases.
7. Prevention of introduction of contagious and infectious diseases from abroad.
8. Medical examination of aliens under the immigration laws.
9. Prevention of spread of communicable diseases in interstate commerce.
10. Regulation of the propagation and sale in international and interstate commerce of viruses, serums, toxins and analogous products.
11. Cooperation with state and local authorities in public health matters.
    (a) Annual conferences.
    (b) Administrative measures.
    (c) Sanitary demonstrations.
12. Cooperation with executive departments and independent establishments of Government in the conduct of public health activities.
13. Coordination of research.
14. Collection of sanitary reports and statistics.
15. Dissemination of public health information by means of publications, conferences, lectures, and demonstrations.

LABOR DEPARTMENT

Children's Bureau—Investigations of child welfare, especially infant mortality, birth rate, dangerous occupations, accidents and diseases of children.

Bureau of Labor Statistics—Collection of information of the means of promoting the welfare of wage earners.

Women's Bureau—Development in industry of policies and methods to prevent the employment of women under injurious conditions and investigations of matters pertaining to the welfare of women in industry.

INTERIOR DEPARTMENT

Office of Indian Affairs—Relief of distress and conservation of health of Indians.

Office of Education—Investigations of physical education and school hygiene (under general provisions of law to promote the cause of education).

National Park Service—1. Sanitation of National parks; (2) Safeguarding health of park employees and visitors.

COMMERCE DEPARTMENT

Bureau of Mines—

1. Investigations of hazards affecting the health and safety of workers in the mineral industries.
2. Prevention of mine accidents.
3. Mine rescue work.

Bureau of the Census—

1. Compilation of statistics of births, deaths, marriages and divorces.
2. International conferences on revision of the international list of causes of death.
3. Construction of life tables.

STATE DEPARTMENT

Consular Service—

1. Submission of public health reports to the Public Health Service.
2. Issuance of bills of health to vessels.

AGRICULTURE DEPARTMENT

Food and Drug Administration—

1. Administration of act to prevent the importation, shipment in interstate commerce, or sale in the Territories or the District of Columbia of misbranded or adulterated foods or drugs.
2. Administration of act to prevent importation of unwholesome milk.
3. Administration of act to regulate the importation and sale in interstate traffic of dangerous caustic corrosive substances.

Bureau of Dairying—Investigations of the sanitation of dairies and dairy products.

Bureau of Animal Industry—

1. Investigations of meat products.
2. Administration of meat inspection law.

Bureau of Home Economics—Studies of the relative utility and economy of agricultural products for food, clothing, and other uses in the home and to make special suggestions of plans and methods for the more effective utilization of such products in the home.

While theoretically there is some overlapping of authority and activities in the several departments, this is more apparent than real. In one department a particular problem related in some degree to health may constitute a major activity, and in another department a minor activity. For instance in the case of milk the essential interest of the Bureau of Dairy industry is the production of an abundant wholesome supply; and for the Public

Health Service the prevention of milk-borne human disease. Moreover, this overlapping occurs in research in which the main problem may profitably be approached from different viewpoints. In practice effective coordination of Federal public health activities of whatever nature can commonly be brought about by cooperative arrangements, and by the assignment of personnel from the central Federal health agency as now provided for by law. These facts make possible an effective Federal health administration by the transfer of comparatively few existing divisions to the central health agency.

Assignments of personnel are now made from the U. S. Public Health Service to the Bureau of Immigration, the Bureau of Mines, the Bureau of Indian Affairs, National Park Service, Federal Prisons, Employees' Compensation Commission, and the Consular Service. (This practice should be extended to other bureaus with Federal health activities of an incidental or temporary nature.)

The committee has intentionally omitted, as among primary or essential health functions, for the purpose of this report, consideration of hospital care of the sick provided under various departments or agencies of the Federal government.

Methods of Administrative Adjustment

Improvements in health service for the children of the United States, now or in the future authorized by act of Congress, and for which appropriations are made to one or more Federal agencies for use through their own personnel, or in the form of grants in aid to the States and their political subdivisions, can presumably be accomplished by one or the other of the following administrative adjustments:

CONSOLIDATION

Unitary control, i.e., the placing of all essential health activities under the administration of the principal Federal health agency, the Public Health Service, is desirable for those functions which are accepted as essential for the application of medical and allied sciences to the purposes of public health under official auspices, whether the community concerned be county, city, State or nation. It is desirable that Congressional enactment provide for such consolidation as will add those activities to the Public Health Service which are essentially parts of a complete Federal health organization.

It is particularly desirable that all federal grants in aid of public health and other cooperative activities with state and local health authorities be administered through the United States Public Health Service.

COORDINATION

Coordination of sanitary and health or other medical activities, developed of necessity in various Federal agencies not primarily concerned with health as a major objective, can be accomplished by assignment of trained, expert professional personnel from the central Federal health agency. This method is appropriate also for those agencies other than the Public Health Service which are carrying on temporary health activities or activities incidental to but inseparable from their other or major function. Authority for such assignments has existed for a considerable time under Congressional act, has proved satisfactory in practice and should be extended by executive direction.

COOPERATION

Cooperation is a suitable method of preventing overlapping and duplication of function, particularly in the fields of research and education, and in regard to those health activities of a specialized character or incidental to public health administration. An effective means of insuring such cooperation is through the exercise of legislative and executive budgetary control over departmental requests for appropriations to conduct such activities.

Through inter-agency conference or consultant boards and committees, wasteful duplication can be prevented without hindering desirable freedom in scientific research and educational expression in whatever Federal agency these may be initiated.

Application of such cooperative effort would, for instance, continue the responsibility of the Office of Education for studies in the fields of physical education and hygiene and that of the Public Health Service in matters of standards for sanitation of school premises, the control of communicable diseases, and health examinations of school children. Similarly, the studies of the Children's Bureau would be such as contributed to knowledge of welfare problems, dependency, delinquency, and so on, while those of the Public Health Service would deal with health and disease of children as members of the general population.

Examples of federal activities which have an incidental health bearing are those of the Food and Drug Administration, the Bureau of Animal Industry, the Bureau of Labor Statistics, the Bureau of Home Economics, the activities of the Children's Bureau other than those for Maternity and Infancy Hygiene, and the Women's Bureau.

While an abundant supply of wholesome animal food products, for instance, is essential to the general welfare, it would be unwise to advocate the transfer of such an activity from the Bureaus of Animal Industry or Dairying on the ground that they had a bearing on the health of man. The all-important functions of these bureaus is to promote animal industry and commerce. The improvement of agriculture, commerce and finance may be mentioned as fields within which activities contributing to health are suitably cultivated as a by-product of other and major functions. While larger crops, better prices and lower taxes have profound influence on nutritional diseases, for instance, neither the laws authorizing them nor the activities conducted can be properly considered as of a public health nature.

A SINGLE DEPARTMENT NOT NECESSARY

Great importance has often attached to the question as to a particular department within which all essential public health activities shall be developed. This is not of vital importance. It is, however, necessary to develop public health organization logically within the department selected, and to impose on that agency all major functions relating to health. Health functions of relatively minor importance in other departments and bureaus of federal establishments should be coordinated with those of the Public Health Service. For this there is existing authority in the Act of April 9, 1930, known as the Parker Act.

The creation of a new department with a cabinet officer for the direction of federal health activities is not essential at present to the accomplishment of the objectives to be proposed.

Recommendations

1. That federal grants in aid of health be continued and increased by specific Congressional act, and that any such legislation which may be enacted by the Congress be administered under the joint supervision and control of the Public Health Service and the State Health authorities, and through no

other channels, in the interest of effectiveness, simplicity and economy of administration within the Federal, State and local governments.

Such federal aid granted in the interest of the health of children should be devoted primarily to building up more effective local health services as a part of a general health program, particularly in those areas and population groups most in need of health services, as determined by federal and State Health authorities and not solely or mainly on the numerical basis of population distribution.

2. That through a continuation and expansion of present federal activity in the field of public health research, and in increasing the number of scientific personnel specially trained in the various administrative problems of public health, marked progress can be made in improving the health of children and of the population as a whole.
3. That consolidation of federal health activities be provided for by Congressional act, specifically authorizing the transfer of the functions together with the personnel and necessary appropriations for their support, of the Division of Vital Statistics of the Bureau of the Census to the Public Health Service, and the health activities of the Divisions of Child Hygiene and of Maternity and Infancy of the Children's Bureau to the Public Health Service, except so far as these latter are concerned with health studies inseparable from and indispensable to the functions of this Bureau in the field of welfare of women and children.
4. That the coordination of federal health activities other than those of the central federal health agency, the Public Health Service be extended by the use of existing Congressional authority for the assignment of personnel from the Public Health Service to them, as may be required.
5. That cooperation between federal agencies for the better administration of educational efforts and researches in the various borderlands of health, and in the ancillary sciences be required through executive direction by the President and members of his Cabinet.
6. That the creation of a Department of Public Health under the direction of a Cabinet Officer, in the Federal Government is not essential to the accomplishment of the desired objectives.

STATE HEALTH ORGANIZATION

After analyzing the various types of state health organizations now existing in the country it is recognized that owing to organic difficulties, constitutional or legislative, it is manifestly impossible to definitely describe a perfect system applicable to all the states

where in detail different local conditions and customs exist. The end results must be held in mind—namely, to secure state organizations which insure to every individual in every home, be it rural or municipal, the benefits of modern scientific knowledge of the protection of health.

Seeing the above manifest difficulties in securing uniformity it is the opinion of the sub-committee that the following points should be recognized by all the states, their application to be modified to meet local conditions of administration, provided however that such modifications should not lower the objective already mentioned.

It is the opinion of the sub-committee that:

1. Although individuals, voluntary health organizations, the medical, dental and nursing professions and other agencies have interest in and responsibility for the public health, the ultimate responsibility for the administration and conduct of public health service is a definite function of government.
2. The state government is responsible for the health protection of the entire State.
3. The State should establish a state board or department of health, non-partisan in character, composed of members or officers fully qualified professionally to deal effectively with its public health problems. The organization should be designed to insure stability, continuity of program and policy, and progressive and effective procedures.
4. The board of health, where such exist, should select a state health officer qualified administratively and scientifically for the position. It should allow him to formulate programs for the board's consideration. It should require him to administer the business of the board, select personnel, formulate legislative and other programs and submit important proposals to the board for its approval. He should possess certain quasi-legislative power to prescribe rules and regulations for protection of the health of the state.
5. The state health officer with the approval of the board should develop as a minimum for his organization certain divisions or services in addition to the central administration. The central administration division should have responsibility for all the common services of the department such as the receipt and disbursement of funds, the purchase of supplies unless such is provided for elsewhere under state law, the issuance of reports and other educational material (unless there be a special division for this purpose). This division of administration, through the state health officer or his deputies, should have responsibility for the State's participation in local health organizations, which should include

administrative and financial cooperation with the local authorities, general leadership and supervision in the development and extension of local health services, in the recruiting and training of field personnel and in other activities which are administrative in contra-distinction to those of a functional or specialized character.

DIVISION OF VITAL STATISTICS

Every state health department should include a division of vital statistics responsible for the collection, recording, analyzing and publishing of all essential data regarding births and deaths. This division or the one of communicable diseases, or both jointly, should collect and analyze all essential data regarding the prevalence and distribution of disease. The information thus collected should be made available to the public as a permanent record and be used in the administrative guidance of the state health service.

DIVISION OF PREVENTABLE DISEASES

Every state health department should have a division of preventable diseases, designed to combat epidemics, to study such diseases and methods for their control, to improve methods, and to give all needed cooperation to the local health organizations in the investigation and control of such communicable diseases. Epidemiological field investigations, wherever called for, should be a part of the work of this division. In states where there are areas in which there exists no responsible local health organization, it is the State's duty to provide emergencies service pending the development of a local organization.

DIVISION OF SANITARY ENGINEERING

A division of sanitary engineering is an essential part of every state health department. It assumes responsibility for planning, supervising, inspecting or otherwise safeguarding public and private water supplies, supervising the disposal of sewage and industrial wastes. The protection of water supplies and the other responsibilities usually given to this division fairly well covers the field ordinarily referred to as environmental sanitation.

PUBLIC HEALTH LABORATORY

Every state health department should establish and maintain one or more central diagnostic laboratories for the use of physicians

and health departments, and such branch laboratories as may be indicated to meet local conditions. In addition to examining specimens submitted for the purpose of diagnosing disease, the state laboratory should be thoroughly prepared to make analyses of samples of milk and water, and to make such investigations in regard to proper disposal of sewage and industrial waste as may be required, and otherwise serve the health officers and physicians of the State in questions involving the public health. The safeguarding of foods and drugs is recognized as important to public health, and in certain States where the control of these matters is a function of the department of health the laboratory should make the necessary examinations. The question as to manufacture of biological products by the state laboratories should be determined by the conditions prevailing in each State. A number of the States, after careful investigation have undertaken the production of some or all of the biological products needed in the conduct of public health work.

MATERNAL AND CHILD HEALTH

Recognizing the importance of giving each child a fair start, that he may not only survive the perils of childhood but enter adult life in the best possible condition with increased vital resistance, and that the dangers of maternity can be definitely avoided by prenatal care, a basic division covering these subjects should exist in all state health departments.

SIGNIFICANCE OF DIVISIONS

The above five basic divisions the sub-committee regards as essential in every state health organization, but in many states where resources permit, the specialized responsibilities of the state health department may be further subdivided by adding other divisions, such as public health nursing, school hygiene, dental hygiene, industrial hygiene and special divisions for each of the more important diseases, such as tuberculosis, venereal diseases, cancer, et cetera. Where such separate divisions cannot be provided for, these subjects should be cared for in one or another of the basic divisions.

STATE AND FEDERAL RELATIONS

Just as the health welfare of every local community within a State is a State's responsibility, the health welfare of every State

becomes a matter of concern of the federal government because the federal government cannot protect the nation unless there be adequate safeguarding of the health, and protection against diseases in each State and each sub-division of each State. This leads to a consideration of the relationship that should exist between the State and federal health organizations and the administrative and financial responsibilities of the latter. Where a local community, whether county or city, is well prepared to supply an adequate health service, the financial responsibility for such community resting upon the State health departments may be regarded as relatively light and need not be increased so long as the community maintains high public health standards. The same may be said with regard to the responsibility of the federal government for the health work of a State. When, however, a community economically is unable to finance an adequate health service then the State for its own protection has a distinct responsibility of supplementing or aiding the community to the necessary extent. Likewise, when State and county have combined their resources and still are unable to maintain creditable standards of public health, the federal government has a distinct responsibility of assisting the community to and through the State to the extent necessary to render uniformity throughout the Nation in maintaining at least what may be regarded as the minimum standard of public health service.

In a study of the aid desired of the Federal Government by States and counties through the state health officers, it has been found that aid of two types are desired: First, personnel; second, money. The personnel desired varies with the states. Certain States desire experienced public health administrators to aid in drafting laws and appropriation bills and in organizing or enlarging the essential branches of the state health service and to carry on field investigations, but the most common type of aid desired is for personnel experienced in organizing, conducting, and supervising local or county health service.

In all branches of state and local health service the most pressing need is for well-trained personnel. The States desire aid, then, in selecting and training personnel and supervising the work and also desire the assignment of personnel to supply substitutes for local health officers desiring to better equip themselves for their vocation by taking special courses of instruction in public health. Financial aid from the Federal Government is needed and has been

requested by more than three-fourths of the state health departments. Some of the aid is desired in rounding out the essential functional divisions of service in the department. The desire in the main is toward paying salaries and other expenses of personnel for health organizations in the county. Although the Federal Government has given aid for special purposes such as venereal diseases, maternity and infancy welfare work, it is now generally believed by the health authorities that whatever the special interest or the special problem in a community may be, it is necessary, if the available knowledge is to be applied effectively, that there be a local organization composed of health officers, nurses and inspectors and in some instances additional personnel to carry on the work.

The recommendations of this committee, then, would be:

1. To advocate for state health departments the establishment of an organization composed of full-time trained personnel to carry on the necessary administrative and special functional public health activities.
2. That the State join in with the counties or other local governments administratively and financially in organizing and conducting adequate local health service.
3. That the Federal Government, through the state health departments, supply to the various states in proportion to their needs the personnel and money necessary to guarantee to every community in the nation a health service that will be able to maintain at least what the authorities may designate as a reasonable standard of adequacy.

CITY HEALTH DEPARTMENT PRACTICE

A study has been made of the municipal health department practice for the year 1923 based upon surveys of the 100 largest cities in the United States. This survey was made by the United States Public Health Service in cooperation with the Committee on Administrative Practice of the American Public Health Association and was reported in Public Health Bulletin No. 164.

Method of Study

The sub-committee, taking this publication as a basis on which to build further information, has addressed one or more communications to the health administrator of each of these 100 cities, has furnished the health officer with a summary of his department's

organization and survey for the year 1923 with the request that these statements be corrected in light of his 1929 expenditures and services. The responses and cooperation have been splendid, 87 cities having replied with information which has been valuable in studying some or all of the trends which have been the basis of inquiry. Our results will, of course, be given only for those cities from which reliable and complete information has been received. In addition to utilizing the summaries in Bulletin No. 164, extracts have been made from the descriptive chapters of this valuable report insofar as they relate to exceptional services being rendered in the various cities.

In 1925 the American Child Health Association published a survey of the health activities of 86 cities including those municipalities whose population in 1920 ranged from 40,000 to 70,000. With the summary of the health activities of each of these cities as a basis, an effort was again made to recreate the activities of these departments in terms of their 1929 experience. Of the 86 cities 69 have responded with information which has been used in some of the studies which are to be reported.

A questionnaire was sent out through the Committee on Administrative Practice of the American Public Health Association, inquiring concerning the form of organization, the personnel, the expenditures, and the numerical results of the services rendered by all health departments in cities (U. S.) having a population of 10,000 or more. A total of more than 800 questionnaires was directed to health departments and usable replies have been obtained and summarized from 319 municipalities of which latter number, 60 fall in class one (cities with a population in excess of 100,000), 106 in class two (cities with less than 100,000 but more than 50,000 population), and 153 in class three (cities with less than 50,000 population). This questionnaire material has been added to the summaries received from the 100 large cities and the 86 cities studied by the American Child Health Association.

A special inquiry has been made in the 70 largest cities to determine the control measures now employed in isolating and quarantining cases of scarlet fever. Scarlet fever was chosen because it represents a vexing problem for most health officers. It is prevalent in all parts of the country. Its etiological cause has not been fully described. The most practical and effective means of control have not been worked out with the certainty which exists in diphtheria. The manner and nature of quarantine, the

duration of quarantine, the handling of contacts, are matters which are administered without uniformity. We believe that the study of the existing practice focuses attention upon the need of administrative and epidemiological research and the ultimate standardization of procedure. It will later be noted that many health officers express the hope that the Federal government will concern itself with matters of research and standardization in administrative procedure. There is no more fertile field than that of scarlet fever. All told there were 70 inquiries made and 44 replied with sufficient information to warrant the use of the material in the compilations which are to follow.

The last inquiry which was directed to the health officers of the 186 largest cities has already been referred to in the introduction as being an inquiry into the current needs of the health officer, an attempt to ascertain whether he is blessed with ample appropriations, whether he needs further support locally or from the State or Federal government, and through what channels such support should be forthcoming. An effort has been made to determine whether in the health officer's judgment there are certain obligations which now fall upon his official shoulders which might readily be transferred to the general practitioner of medicine. There seems to be an increasing tendency to transfer to the family physician certain activities in preventive medicine which involve direct personal service. A beginning has been made in effecting cooperative arrangements in the programs for immunization against diphtheria, smallpox, or typhoid fever.

Opinion of Health Officers

With the view of determining the judgment of the average health officer now administering the local health departments of this country, with respect to the needs of his department and the possible means which may be made available for coping with administrative problems, which he is now unable to meet because of lack of cooperation or lack of funds, inquiry was made with the following results:

The opinion was sought of the health officer of each of the 186 cities with a population in 1920 of 405,000 and above. Replies have been received from 83 health officers, the results having been tabulated from the first 79 replies returned.

The first question aims to secure an expression from the health

officer as to what he considers the three most important problems in his city that the official and voluntary health agencies are inadequate to cope with. Twenty-four or 30 per cent of the health administrators indicate that problems of child health, including life and health conservation among infants and pre-school children, constitute a major problem with which present facilities are unable to adequately cope.

Tuberculosis was a close second to child health, 21 health officers or 27 per cent of the total indicating that their major problem is in the field of tuberculosis-control. It is believed that many of the health officers have in mind the child health aspects of the tuberculosis problem.

Maternal Hygiene appeared next in line of frequency—there being 18 officials or 23 per cent of the total who indicate that prenatal service, obstetrical care and supervision of midwives constitute major problems for which adequate means of control are not at hand. There were 17 health officers or 22 per cent who mentioned the control of the venereal diseases as constituting a problem requiring additional facilities for official and voluntary agencies. Among the other items which appear prominently in the list in the order of frequency, are: health education and periodic physical examination, housing and general sanitation, communicable disease control, mental hygiene, hospitalization for communicable diseases including tuberculosis, mental cases, and general medical and surgical cases. Industrial hygiene, dental hygiene, cancer, and heart control measures also received prominent mention.

In reply to the question as to whether the Federal Government can aid local health work either directly or indirectly, 60 health officers replied in the affirmative and 14 in the negative.

There were 23 instances in which it was felt that financial aid should be forthcoming to the local health unit either directly from the federal government or through the state health department. The predominating opinion however, seemed to be that those funds should be made available, as in the past, through the medium of the state health department.

In 22 cases the health officer feels that the federal government should render a consultant service to local health departments including such administrative surveys as might be requested by the health officer. Financial support and consultant service received most prominent mention.

There were 17 administrators who expressed the belief that the federal government should carry on a definite program of educational propaganda thereby stimulating more interest in local health work.

There were 17 health officers who believed that the federal government should carry on demonstrational research with the view of stimulating standardization and local interest in health work.

There were 4 health officers who expressed the hope that the federal government would do more with the training of adequate personnel.

It is quite probable that many of the recipients of the questionnaire labored under the impression that when we spoke of federal aid, we had in mind primarily financial aid, and this may be the reason this item received such prominent mention.

It is not unlikely that many of these same health officers would have laid more particular stress upon some other methods of furnishing help had the question been directed in a different manner.

Conclusion

1. It seems to the sub-committee that the most outstanding need as evidenced by both trend in administration and the opinion of the health officers is the furtherance of plans whereby there shall be provided for every local area (whether city, county or combined units) the service of a full-time local health organization with a well-trained personnel. Not only should the health officer be a man of experience and training but his responsible subordinates should have a corresponding training in their special fields of activity.
2. Such a full-time health organization should have adequate financial support. While the trend in municipal health departments is toward an increase in per capita expenditure, the increase has been at such a comparatively slow rate as to be almost negligible in many communities. In some cases there has been an actual decrease in the amount of money per capita expended for public health work.
3. The sub-committee feels that there should be better coordination between the various agencies, official and non-official, which are interested in field research and standardization in administrative practice. There is obvious need also for better organization and coordination in transmitting to health officers the results of such investigations and demonstrations. The federal public health service might well serve in this capacity. Emphasis should be placed upon effective public health administration, with the view of relieving the health

officer of burdensome activities which are not productive in health conservation and substituting in their place renewed effort in those fields which are generally recognized as belonging within the purview of the modern health department.

4. The sub-committee feels also that there should be better coordination in the extension of consultant service to local health departments and that the federal public service should play a leading part in the performance of such service.
5. The sub-committee feels that particular heed should be paid to the training of individuals who are selecting public health as a career. The federal public health service might well assist by coordinating its activities with other teaching centers, and making it possible not only for any who are entering the field to obtain the best type of training, but likewise provide facilities for post-graduate teaching of those already employed as health officers.
6. The sub-committee also believes that there are some activities now included in the program of most health departments which can be gradually transferred to the general practitioner of medicine. In the interest of child health, insofar as practical the family physician should become a practitioner of preventive as well as curative medicine; he should take an interest in seeing that his clients are protected against smallpox, typhoid fever, and diphtheria, and that adequate periodic physical examinations are made. We believe that the federal public health service should stimulate interest in extending post-graduate instruction to the general practitioner of medicine with the view not only of interesting him in this type of service but also of establishing reasonably uniform methods of procedure. This can be brought about by improving cooperation between health departments and medical societies, and providing the machinery either within the local health organizations or in local centers of medical education through which the great mass of medical practitioners can be reached. In some places clinics are already being held for the acute contagious diseases and tuberculosis, and are generously supported by private physicians who are anxious to broaden their knowledge in these fields and thus become a more potent factor in the early discovery of communicable diseases. In at least one city, a plan is already in operation whereby contact is being made with general practitioners in small groups of a dozen or more, where an effort is being made to teach the physician the technique involved in diphtheria immunization and to initiate a uniform system of providing a physical examination for pre-school children. In several States a large foundation has already provided fellowships for medical prac-

titioners in rural areas who are given post-graduate instruction at large centers with the view of assisting these physicians to practice modern curative and preventive medicine in their respective communities. This committee commends this method and recommends its extension.

7. The sub-committee feels that in the interest of efficient management there should be coordination and amalgamation of the various health services of the federal government. Furthermore, your committee believes that the United States Public Health Service constitutes the channel through which all major federal health activities should be administered.
8. The sub-committee believes that the contact between the federal government and local health departments should be through the medium of the state departments of health.
9. The sub-committee feels that the experience of the municipal health departments has demonstrated conclusively that programs for the improvement of the health of the mother and child can successfully be conducted only as part of the general program of a well-organized health department.

RURAL HEALTH ORGANIZATION

Efforts to furnish protection to the health of citizens of the rural parts of the United States date from the early days of the republic. Massachusetts as early as 1797 established a system of local boards of health. Connecticut followed in 1805. The movement did not make great headway prior to the Civil War, and up to that time only 7 States had provided for the organization of local boards of health. After the year 1865 the movement began to gain headway, and by the end of the nineteenth century practically all the States had made some provision for health service in rural districts.

In New England and in the Northern and Northwestern States, in general, local government was based upon the town or township as a unit and the administration of health service was confided to these units. Towns and villages were authorized to organize boards of health and to employ health officers and, in most cases, such action was later made mandatory on all local units of government. In the Southern and Southwestern States where the unit of local government was the county, county boards of health were provided for or the county governing board was authorized to perform the functions of the board of health and to employ a health officer.

These boards of health were given very broad powers indeed, but in practice they concerned themselves usually only with communicable diseases and nuisances. Routine control of communicable diseases was left frequently in the hands of the private physicians, and only in the case of the occurrence of smallpox or of serious outbreaks of other diseases was the health officer expected to take action.

Results of Twenty Years' Experience

Within the past 20 years, much experimentation has been done in the field of rural health administration and from this experience it is possible to draw certain general conclusions on which it is believed may be based a sound program for future development:

1. That the system of part-time rural health officers has definitely failed to adapt itself to the modern conception of public health and cannot be expected to make such adaptation in the future.
2. That public health nurses working in rural districts, without competent administrative direction may render important service to individual cases, but cannot be expected to render satisfactory general health service on a permanent basis.
3. That the system of deputy state health officers assigned to local districts cannot satisfactorily furnish effective local health service except in some cases in connection with communicable diseases.
4. That efforts to conduct special phases of public health activity in rural districts prior to the establishment of a sound, permanent health organization, are usually expensive, inefficient and temporary in effect.
5. That a permanent, efficient and economical solution of the problems of rural health administration may be had only by the organization of rural health departments of a size sufficient to make possible the employment of a competent, technically-trained executive head, responsible for the development of a sound, comprehensive administrative program, and free to devote his whole time and energy to public health work. A staff of such a county health department should include such nursing, laboratory, inspectorial and clerical personnel as is necessary to carry on a complete program of health service.

   The problem of financing an adequate program of health service for the county is by no means simple. In certain of the larger counties, particularly those with extensive industrial development, or with large properties belonging to public utilities subject to local taxation, county revenue

may be adequate for the purpose. In counties where the population is largely agricultural in character it is frequently difficult and sometimes impossible to secure, from land taxes alone, sufficient revenue to finance a health program together with the expenditures necessary for roads, schools, charities and the support of the general government. At the time when our present system of local government was organized, real property constituted the great bulk of the national wealth, and the land tax constituted practically the sole source of public revenue. With the change in our economic system, however, only a small part of the national wealth is now represented by real property and it is beyond the power of the local government to reach for purposes of taxation the great bulk of the national wealth. It is entirely proper, therefore, that the taxes collected, by the States and by the Federal Government, on these more intangible forms of property should be used to supplement local funds in supporting an adequate program of health service. In education the allocation of state funds to local communities has long been recognized as a necessary and entirely proper procedure. In the construction and maintenance of highways both the state and federal government contribute to the highway programs of local communities, provided only that they conform to a general plan for the State and Nation. There is ample precedent, therefore, for such a procedure and many of our States now give considerable contributions to county health organizations and small, but steadily increasing appropriations by the federal government have been made available in recent years for the same purpose.

Such grants of state and federal funds may be made to serve important purposes. They may make possible the establishment and operation of local health departments in areas where no satisfactory organization could be maintained without such aid. Such grants may be made contingent upon the employment of properly qualified personnel and upon the efficient conduct of field operations. Additional grants for the undertaking of new activities may likewise stimulate an extension of the work of certain local health departments which might otherwise be difficult to secure.

Summary of Findings and Recommendations

1. Of the various experiments in rural health administration which have been carried on in the United States up to this time, only those based upon the organization of a health department for the service of rural areas of considerable size seem to offer hope of a solution of the problem of rural administration which will be effective and lasting.

2. Such rural health departments must in general be based upon the county as a unit, and should in all important respects be made integral parts of the county government. For counties whose population is too small or whose financial resources are inadequate to justify a separate organization, some plan of uniting with other counties in the formation of a health district of sufficient size must be devised.
3. Each such county health department should be under the general direction of a board of health or health commission. Such board or commission should include not more than seven members, appointed for long terms and these terms should expire in rotation. The board should include representatives of the county government, of the medical profession and of the general public.
4. The health officer should be charged with all executive and administrative authority. He should be a physician trained and experienced in the administration of health departments and appointed without reference to his residence or political affiliations. He should be required to give his whole time to the duties of his office and should not practice medicine or engage in any other business. He should receive a salary equivalent to the net income of the better class of practitioners in the county, should be appointed for an indefinite term, and should be removed only after charges have been preferred and a hearing had before some impartial body.
5. The personnel of the county health department should in general include physicians, dentists, nurses, laboratory workers, clerks, inspectors and in some cases sanitary engineers, statisticians, veterinarians and other technical and lay groups. Authority should be given for the employment on part-time of such practicing physicians as may be needed for clinical service, and provision made for reasonable compensation for such service. Subordinate employees should be appointed without reference to their political affiliations or their previous residence, and the salary scale should be so adjusted as to attract a sufficiently large group of applicants to make possible the selection of satisfactory persons.
6. Where a state or county system of civil service control exists, all positions in county health departments should be classified and all appointments should be made from lists certified by the commission. Where such a system is not already in existence, legal provision should be made for the examination and certification of all technical employees including health officers, nurses, laboratory workers, statisticians, and engineers by the state department of health, the state university, the state board of education or some other body. Such examination, if rigidly and impartially con-

ducted, offers the best guarantee of freedom from partisan political influences in the making of appointments.

7. The system of state and federal subsidies to be used in promoting and maintaining county health departments has proved its utility and should be largely extended.
8. For the purpose of promoting the establishment of county health departments in areas not now organized, of maintaining standards of service, and of regulating the disbursement of funds available for the assistance of such units, it is usually desirable that in the state department of health there be provided an administrative unit concerned primarily with local health organization.
9. Federal funds now available, or which may be made available, for the promotion of rural health service should be disbursed through the agency of the state health authorities, and should not be allocated on the basis of population alone. In general, federal funds should be expended for the promotion and maintenance of rural health organizations rather than the promotion of special forms of health activity.
10. In the Bureau of United States Public Health Service there should be a division, equal in rank and importance to existing divisions and charged with the duty of assisting the States in promoting rural health service, of expending federal funds appropriated for that purpose, and of assembling and publishing statistical and other information regarding rural health organization and administration in the United States. This might be accomplished by changing the title of the present Division of Domestic Quarantine and making the promotion of rural hygiene its major function.

THE RELATION OF OFFICIAL AND NON-OFFICIAL AGENCIES IN PUBLIC HEALTH ORGANIZATION

The non-official agencies operating in the health field may be grouped roughly under five main heads, with their major activities under seven main heads, as in the table below. A single asterisk indicates a relatively modest contribution to the particular field, a double asterisk a major contribution.

CONTRIBUTION OF VARIOUS TYPES OF NON-OFFICIAL AGENCY TO THE PUBLIC HEALTH PROGRAM

Type of Agency	Grants for			Type of Contribution			
	Research	Training of Personnel	Service	Research	Standardization and Consultant Service	Propaganda and Health Education	Service
Foundations	**	**	**	**	*		
National Associations	*	*	*	*	**	**	*
Insurance Companies	*	.....	**	*	.....	**	**
Commercial Groups	.....	.....	.....	.....	.....	*	
Local Association (including branches of nationals)	.....	.....	*	.....	.....	**	**

The financial contribution of the non-official agencies may be estimated as follows:

Type of Agency	Annual Contribution to Public Health
Foundations	2,500,000
National Associations and their Branches	4,500,000
Life-insurance Companies	5,000,000
Commercial Groups	500,000
Local Associations not Branches of National Associations	15,000,000
	27,500,000

Expenditures for Public Health

It seems clear that $25,000,000 to $30,000,000 a year would be a conservative estimate of the sums contributed by non-official agencies to the operating of the health services of the United States. The cost of the federal public health service is about $10,000,000, that of the state health services, $25,000,000; while the 100 cities of over 70,000 population spend about $31,000,000 of tax money and the cities of between 40,000 and 70,000 population about $2,500,000. There is a total known official budget

of $68,000,000, with no allowance for the local health service of the smaller communities. The official expenditures for public health may then safely be set at 70–75 millions and the contribution of the non-official agencies at about 25–30 millions, or even one-fourth of the total. From the material provided for by the A.P.H.A. we find that in a group of 59 cities, about one-quarter of the total health budget comes from non-official agencies. Such agencies supply between 40 and 50 per cent of our public health nursing service and about one-fifth of our public health clinic service (varying from 10 per cent in the tuberculosis field to over 50 per cent in that of prenatal care).

Grants in aid for research and for training of personnel do not involve any specially difficult problems of relationship with official agencies.

Grants for actual service to official health agencies include chiefly the support given to state and county health work by the Rockefeller Foundation and to special demonstration areas by the Commonwealth and Milbank and Rosenwald Funds. Such gifts have been, and are likely for some time to come to continue to be of inestimable value. It is the policy of all of the foundations listed to work through state and local health authorities.

Policies that Should Govern Grants-in-Aid

The general policies which should govern grants-in-aid for service by official agencies may perhaps be summarized as follows, as developed through the experience of the foundations working in this field:

1. The project should be clearly formulated with a detailed budget and understood and approved by the foundation and the state and local health authorities.
2. There should be a definite period established for the grant, usually involving a gradual progressive assumption of the financial burden by the state and local agencies.
3. Actual administration should be completely in the hands of the local official agency.
4. The work should be supervised by the state department of health (except in the case of large cities where little more than formal approval by the State may be involved).
5. The supporting foundation should keep in touch with the progress of the work through a single individual designated for the purpose and this individual should be a trained and experienced health administrator.

The activity of non-official agencies along the lines of standardization and consultation service, propaganda, and popular health instruction should be governed by two distinct principles of policy if sound results are to be attained:

1. Whenever a voluntary agency undertakes a local survey or applies standards locally or stimulates local developments through a consultation service, in any part of the public health field, the local health officer should be consulted and (except in the rarest instances) his approval secured, if the action in question has a bearing on the general health program of the community.
2. Very special efforts should be made by the non-official agencies to get together, not only with official authorities but with each other, and to agree upon a concerted and reasonably balanced program of community health promotion. In many cities, health councils have been established with notable success and the development of such a health council is desirable in every large community. It is most unfortunate that the national associations themselves instead of leading in this movement have lagged behind it. It is true that a national health council was created in 1921 with somewhat this end in view; but it is merely a common service bureau for its member agencies, not a health council in any true sense of the term. The doctrines of cooperation and coordination which the national associations preach, could be greatly furthered by providing machinery for really effective common action, for it is in connection with direct service to the public that the really serious problems of relationship between official and non-official agencies arise.

That the service of the non-official agencies in the local operating field is of inestimable value, there can be no shadow of doubt. These voluntary groups are pioneers carrying the gospel of public health far beyond the confines of its official hierarchy. Even in communities where official agencies are established, it is the voluntary agency which serves as a pioneer in the development of new and experimental lines of service.

Nor is the contribution of the non-official agency to be measured solely in terms of dollars and cents, large as its contribution is to our total health budget. Of equal significance is the intelligent leadership and the individual service rendered by the members of the volunteer groups concerned.

Nor is the sub-committee by any means certain that the rendering of public health service by voluntary agencies is a purely temporary affair. It has been commonly assumed that the function

of the non-official agency was merely to demonstrate new enterprises in the public health field and then to turn them over to the public authority. Thus the American Red Cross up to 1928 authorized its chapters to conduct public health nursing services only as demonstrations to be taken over by other agencies as soon as possible.

Two years ago, however, the Red Cross changed its nursing policy from one of demonstration "to one of permanent participation in the public health nursing work of the community."

The theory under which this action has been taken is that the government, while it has many advantages in the performance of public health work, also suffers many handicaps which are not encountered by the voluntary agency; that these handicaps can in a measure be overcome by joining the two in a partnership which requires a real sharing of ideas, of labor and of responsibility. According to this theory the people do well to provide themselves with public welfare service both through the regular channels of government and through the freer and more flexible channels of voluntary association. And partnership between these two, the voluntary agency and the government, in the joint conduct of public health nursing, because it tends to combine and accentuate the best features of each and to neutralize their weaknesses, is highly desirable.

The advantages of non-official or joint operation does not lie primarily in the fact that the type of leadership involved may often ensure a higher quality of service than the official agencies in a given community could offer—although such is not infrequently the case. It lies, to an even more important degree, in the fact that the non-official agency is often free to offer an entirely different and a sounder form of service. Thus, the generalized type of nursing combining bedside care and health teaching is almost universally admitted to be the soundest form.

In the clinic field there are often very similar advantages, both as to personnel and policies, in the conduct of a particular clinic of a primarily preventive type in connection with a non-official hospital or polyclinic.

Principles Recommended

There are four general principles which should be adopted in order to make non-official participation in local health programs most fruitful:

1. The health officer of any governmental unit must be recognized as the one person directly responsible for the health of its people. It is his task to formulate general policies of health promotion and to secure coordination of all health agencies within his jurisdiction. In large communities he should be provided with specialists competent to direct the entire community program in such fields as child hygiene, tuberculosis control, and social hygiene. It is the primary duty of the non-official agency to support and aid him in his difficult task.
2. Each particular function in the field of health promotion should be performed by the agency best fitted to perform it. In sanitation, food control, vital statistics, epidemiology, the official agency is generally the only one to be considered. In child welfare, tuberculosis control and social hygiene, there are many functions which can best be discharged by non-official agencies and in public health nursing, the non-official agency has unique advantages. The wise health officer is the one who utilizes such resources to the fullest possible degree.
3. The non-official agencies operating in a given community should be joined together in a health council, perhaps under the chairmanship of the health officer or his representative, and should make a serious study of their common problems and mutual relationship with a view to definite agreements as to the sphere of each.
4. Permanent contacts should be established by the membership of the health officer or his representative on all non-official boards, so far as possible. The health department itself may frequently profit by the appointment of voluntary advisory committees, particularly in regard to its medical and nursing activities.

INSTRUCTION OF MEDICAL STUDENTS AND THE TRAINING OF HEALTH PERSONNEL

In discussing ways and means for expanding public health service, and for making more efficient administrative practice in health organization, it is essential that consideration be given to the instruction in hygiene and preventive medicine to undergraduate medical students. Obviously it is from this group that health officials must be recruited as well as a large percentage of positions filled in specialized phases of public health. A health organization which is projected and administered by unskilled personnel often meets with a disastrous outcome and even though this may not occur it is impossible to attain the largest dividends in the

expenditure of funds for the protection of the public health. It is therefore imperative that more ample provisions be made for adequate preparation of those who may choose public health as a career.

For convenience this report may be considered under the following headings: (1) Instruction of undergraduate medical students in hygiene and preventive medicine; (2) facilities offered to those who desire to specialize in phases of public health, as applied bacteriology, epidemiology, statistics, child hygiene and sanitary engineering; (3) training of health officers; (4) preparation of public health nurses; and (5) training of sanitary inspectors.

Undergraduate Instruction in Hygiene and Preventive Medicine to Medical Students

A communication was addressed to each of the 76 schools of medicine in the United States approved by the American Medical Association with a view of eliciting the following information: (1) Whether hygiene and preventive medicine is classed as a major subject; (2) the number of hours devoted to didactic and to field instruction; (3) whether the teaching of preventive medicine is administered by a special department; (4) whether this subject is taught by a separate faculty; (5) the number of full-time and part-time instructors; (6) the budget; and (7) the general content of the course.

On September 30, 1930 replies had been received from 59 schools. Eight of these schools give only the first two years of the regular medical course and they will not be considered in this discussion, as the time during these years should be largely devoted to fundamental sciences, the introduction to physical diagnosis, and clinical medicine. There follows in the full report data in support of statements hereinafter made concerning medical schools.

To summarize, it may be stated that of the 51 medical schools included in this study, 9 or possibly 10 may be regarded as having provided adequately for teaching preventive medicine and public health in a manner comparable with the methods employed in teaching other major subjects in the curriculum, such as anatomy, medicine and surgery. The teaching in the remainder of these schools appears to be a desultory, uninteresting and poorly organized type of instruction. The teaching is not being done as well as in

many minor subjects. In only a few instances does it seem that a broad concept of public health is being developed or that the subject is being treated in a manner commensurate with its intrinsic importance. The frequent combination of public health with bacteriology and even pathology does not appear logical or sound from the pedagogical point of view since a modern public health program is a dynamic function of clinical medicine.

It is generally agreed that medical and dental students should be given adequate instruction in theory and practice of preventive medicine and public health. This is indispensable if the physician and dentist of the future are to become the health advisors of the family. Moreover, it is of the greatest importance as a means of stimulating interest on the part of promising undergraduate medical students in public health as a possible career.

The information herein presented indicates unmistakably that this phase of medical teaching is generally neglected and that at the present time medical and dental students are being graduated with inadequate knowledge of this important phase of medical service.

Academic Preparation and Experience of Public Health Personnel

It is a well-known fact that the success of a public health program depends to a great extent upon the quality of the personnel engaged in the work. An attempt was therefore made to determine the training and experience of persons now employed. The samples comprise 551 physicians, 1,351 nurses and 803 sanitarians. They represent 29 state health departments, 53 city health departments, and 184 county health departments. All persons are reported as being employed on a full-time professional basis. Information is given in tabulated form in the full report with reference to the training and experience of public health physicians, nurses and sanitarians.

Training Facilities and Their Utilization

It was deemed advisable to limit inquiries to the training of the three main groups engaged in the application of public health measures, namely, physicians, nurses and sanitarians. Laboratory workers were omitted since the securing of qualified laboratory workers has not presented such serious administrative difficulties.

In the main there are four methods by which public health workers are prepared for their specialized work: experience, institutes, field training, and organized instruction. Organized instruction may be subdivided into short courses and courses leading to higher degrees. Each of the several methods is considered separately although in practice two or more of the methods may be combined.

A discussion follows in the full report concerning the training of health workers with reference to: (1) Experience, (2) institutes, (3) field training, and (4) organized instruction. Special consideration is given to the training of public health nurses and sanitarians.

In respect to courses leading to higher degrees in public health, from the best information obtainable, there are 12 universities in the United States offering courses leading to higher degrees in specialized phases of public health, such as bacteriology, epidemiology, statistics, child hygiene and sanitary engineering. In two of these universities, namely, The Johns Hopkins and Harvard, schools of hygiene and public health are organized and well equipped with a completely independent faculty and budget quite comparable to a school of law or a school of medicine. The remaining universities have departments of hygiene and public health organized around a small teaching nucleus which is more or less definitely identified with some division of the university, most frequently the graduate school. Under the latter plan extensive use is made of other departments and teaching facilities of the university, consequently there is seldom any well-defined budget or personnel. In such institutions it is extremely difficult or in some instances impossible to separate students taking professional public health courses from those taking courses in the related biological sciences. The replies to questionnaires sent to the schools of hygiene and public health were not sufficiently complete or specific to permit tabulation of students pursuing the different courses.

Six of the institutions reported an enrollment of 251 students. Three schools not reporting had an enrollment of 127 students during the scholastic year 1928–1929. It may therefore be assumed that during the scholastic year 1929–1930 there were about 375 students pursuing courses leading to higher degrees in public health. According to the report of the Committee on Training of Personnel of the American Public Health Association, 73 graduates received degrees in public health during the school year, 1928–1929.

Conclusion and Recommendations

The problem of securing trained personnel is one of the first magnitude in the field of public health administration. The public health movement has now reached the point where it is difficult to secure qualified persons to expend in an effective manner the funds which can be made available. Second in importance is the necessity of having a medical profession sufficiently informed to sponsor public health programs and assume their proper rôle as private practitioners in the broad program.

It is quite apparent that medical schools are not doing what they should to place preventive medicine in the dignified position it should occupy and teach the subject in an organized and effective way comparable to the manner in which medicine, surgery or other major subjects in the curriculum are being handled.

There are two very excellent schools of hygiene in the United States organized with independent faculties and budgets. In 7 of the 10 universities, fairly satisfactory departments of hygiene and preventive medicine are organized around a small faculty which also draws upon other branches of the university for assistance in teaching. In 3 universities, the departments do not seem to be well organized or financed. The facilities for giving short courses in public health to physicians do not seem to be so well developed. It appears, however, that such courses could be organized if the demand were created. In general, it may be said that the facilities for teaching preventive medicine to medical and dental students are not being utilized in the universities of the United States.

So far as could be determined there are no well-recognized standards governing qualifications for public health positions. Such higher standards as have been enacted into law are rather vague and even these standards are not enforced except sporadically.

The undergraduate teaching of nurses is very unsatisfactory from the public health point of view. It is exceptional for a school of nursing to stress the preventive viewpoint in the undergraduate curriculum. There is need for better facilities for teaching graduate nurses public health. The administration of public health nursing education by schools of social science and schools of education is not a logical or satisfactory arrangement.

The following recommendations seem essential to any material or rapid progress:

1. The establishment of departments of preventive medicine in medical schools with provision for separate full-time faculties and adequate budgets.
2. The development of short courses in public health for physicians, nurses and sanitary inspectors; such courses to be organized in close relation to departments of hygiene and preventive medicine in medical schools or schools of hygiene.
3. The establishment of definite qualifications for employment in public health positions. A plan should be sponsored by state departments of health and enforced by a licensing system or be incorporated into a program of state subsidy to local health organizations.
4. Pending the establishment of educational standards and an adequate scale of salaries the various foundations should encourage the utilization of educational facilities by the creation of liberal scholarship funds.
5. The Federal Government might assist departments of hygiene and preventive medicine of universities by the temporary assignment of a limited number of qualified teachers drawn from employees in its several bureaus. More particularly it should be empowered to make its grant of aid to local health organizations contingent upon the employment of qualified personnel.

ADMINISTRATION OF CHILD HEALTH AS A PART OF THE OFFICIAL HEALTH PROGRAM

While child hygiene is an integral part of the whole public health movement and cannot be separated from public health as a whole, specialized and intensive programs centering on the health of the child have been responsible for the present interest in the well-being of the child and bespeak the need for continued research and special information on every period of childhood, if the society is to provide opportunities and conditions which will insure growth into efficient and healthful citizenship.

Within a comparatively short period child hygiene has come to be recognized as one of the major activities of public health programs, due to the fact that as public health developed, the period of childhood was found to be the one needing most attention. While newer and unapproved methods are still being tried, the fundamentals of child hygiene have been fairly well standardized, so that child health covers every activity which affects the health of the child from the beginning of the prenatal period through adolescence. The sub-committee believes that while the above is true there is still need for continued research along both

administrative and scientific lines. This research should be made not only by local health departments as far as possible but also by assistance from governmental and philanthropic agencies, especially as it is recognized that much of the inadequacy in child health programs is due to inadequate budgets.

While other public health fields deal with specific functions, the field of child health deals with all of them as they affect the health of the individual child or groups of children.

Further, all public health activities concern the plastic age of childhood more definitely than they do adults.

With the highest incidence of morbidity and mortality in this age group, it is evident that preventive measures to be effective must be begun in this period.

The prevention of disease and the establishment of good health habits early in life practically assure not only good health in childhood but also throughout life.

The above conceded facts should serve as the basis for formulating child hygiene programs.

PROCEDURE

Your Committee considers that fundamentals of child health may be practically administered through the following procedures:

1. Prenatal Supervision—The official health agency should advocate medical supervision of all prenatal cases and promote this idea by providing conferences and field nursing service along recognized standard lines.
2. Infancy and Pre-School—The period from birth to school age presents a variety of specific problems and more specific data on the health problems of this age group are necessary. From the point of efficient administration this period should be handled as an entity, that is, not divided into separate conferences for specified age groups.

   Child health conferences should provide advisory and educational service, and treatment clinics should also be used as a means of education.

   All children should be vaccinated against smallpox and immunized against diphtheria before attaining one year of age and other standardized immunizations should be utilized as early in life as may be deemed advisable.
3. The School Child—The official health agencies should be responsible for the health of the school child. This involves control of contagion in and out of school, the physical examination of school children with follow-up incident to the

correction of defects, and sanitation and ventilation of school buildings.

Formal health education is a pedagogical matter and should be given by adequately trained classroom teachers, but such instruction should not preclude the use of assistance from the official health agency.

It is the belief of this committee that further progress in child health work can be obtained through the careful reporting of data and consequently standardization of record forms is desirable and necessary. It is recognized that other factors such as communicable diseases, milk control, etc., each play an important part in child health but these activities are considered in other sections.

Recommendations

From the above and from what is presented in this committee report on the present status of child hygiene, the following recommendations are made:

1. All child health activities whether under federal, state or local government, as well as activities sponsored by private agencies, should be coordinated and under official supervision or direction.
2. Child health activities should be standardized so as to be scientifically sound.
3. Extension of child health activities with emphasis on preventive health measures directed to the early age groups, is indicated.
4. Increased federal, state and local, as well as private appropriations, are necessary to perfect and extend further child hygiene activities.

PRACTITIONERS OF MEDICINE AND DENTISTRY IN RELATION TO HEALTH PROGRAMS

It is the purpose of this sub-committee to present in its report some of the fundamental principles pertaining to the relation between practitioners of medicine and dentistry and the public health program. In general, it is evident to the committee that a better understanding and attitude of mutual help is developing between health agencies and physicians and dentists.

Public Health Organizations

The plan of public health organization in the United States has been wisely developed for our form of government. Each State

and local government unit is given legal authority to insure the protection of health within its own jurisdiction. The federal public health service has well-defined powers and it is not intended that its functions shall in any way conflict with the prerogatives and powers of state and local health departments.

The activities of the Federal Government in cooperation with the respective States for the protection of the public health should be conducted by the United States Public Health Service. In this way and in this way only will it be possible to unify effort, avoid overlapping, make for efficiency and simplify administrative procedure.

It is important that the duly constituted health agencies of the Federal, State and local governments shall be recognized as being fundamental and that they shall be ascendant in the control of health programs.

Mutual Responsibilities of Official Health Agencies and the Medical and Dental Professions

There are certain phases of public health work which are especially well adapted for developing a constructive program of cooperation between health agencies and the physicians and dentists of a community. The state and local health departments should advise with the medical and dental professions in determining such programs. The state medical and dental associations should appoint, for the benefit of the state health officer, advisory committees approved by their legislative bodies. Likewise, the district or county organizations should appoint advisory committees for local health officers. These committees will prove invaluable in adjusting differences, stimulating interest and in securing cooperation on the part of the practitioners. Practicing physicians and dentists are, and should be, the most important factors in safeguarding the health of the public. Therefore, any method employed in public health administration which tends to destroy the confidence of the community in these professions is not in the interest of human welfare, and should not be tolerated.

Immunization Against Disease

The health department is obligated by law to prevent in every practicable way communicable diseases in the community, and it is well within the province of a health officer to cause to be em-

ployed methods made available by scientific research for the control of disease. If there is a mutual understanding between the professions and health departments, such work can be done so as to make a definite contribution in this phase of service.

Health Centers and Clinics

The work of health centers and clinics should be administered so as to integrate their service with the routine practice of the local physicians and dentists. The methods employed must not interfere with the relation which has so long existed between practitioners and their patients and which, on the whole, has been satisfactory to both.

Legal and Ethical Obligations of Physicians and Dentists in the Control of Communicable Diseases

At all times, it is the duty of physicians and dentists to notify the properly constituted health authorities of each case of communicable disease under their care, in accordance with the laws, and with the rules and regulations of the health authorities. By observing these requirements, they render invaluable aid in the prevention of infectious diseases. Health officers can, in turn, be of assistance to practitioners in consultation for the diagnosis in suspected cases of contagious disease. Cooperation of this character will increase public confidence in the health departments and in the professions.

Qualifications of Administrative Personnel

Adequate training and administrative ability of health officers should always be recognized as important factors in insuring efficiency and permanency of public health organization. Political expediency should not influence the appointment of public health officials who should be unhampered in dealing, on the basis of scientific principles and sound administrative practice, with public health problems. An outstanding need at the present time for the promotion of public health in this country is to make more secure the tenure of service of well-qualified workers. The removal of an efficient health official for political reasons alone should be an impossibility in any state or local unit of government. The remuneration of experienced, well-qualified personnel should be

commensurate with the services which they render to the community.

maintained in coordination with

Establishment and Direction of Health Programs

It should be clearly recognized that public health programs should be established and ~~directed by~~ official health agencies and that social service and welfare activities, when desirable in connection with such programs, should be ~~subservient to and~~ coordinated with them.

Educational Activities

It is desirable that the medical and dental schools of this country should take more interest in instruction in preventive medicine and public health on the right basis for medical and dental students. It is obvious that students who have graduated in the past have not always had opportunity to secure information on prevention, comparable to facilities and advantages afforded in clinical medicine and dentistry.

One of the most important duties of health organizations has to do with the dissemination of helpful information concerning the prevention of disease and the conservation of health. In fairness to the public and in the interest of scientific truth material purporting to be educational in character should be based on facts scientifically proven, or, in the absence of such facts, should reflect the best scientific opinion of the time.

The physician and the dentist as individual practitioners and in their professional organizations are under obligation to the public and to science to give to their patients and to the public practical information that will contribute to the promotion of individual and community health. This obligation is now being better discharged by representatives of the medical and dental professions in routine practice; they are instructing their patients concerning measures which are helpful in the observance of personal hygiene and in the prevention of disease.

These activities of the private practitioner in his proper share and of his societies and of public health agencies should be extended until the intensive practice of preventive medicine and dentistry has become routine in the everyday work of every qualified physician and dentist.

B. COMMITTEE ON COMMUNICABLE DISEASE CONTROL

Introduction

The purpose of this report is: first, to point out the importance of communicable diseases among children; second, to review the current control practices; third, to recommend those practices which seem most valuable; and fourth, to suggest the fields in which further study is most urgently needed. It is felt that the report will be most effective if directed towards those responsible for communicable disease control in this country. It can be interpreted by them to their general public, without whose support no effective control is possible.

Prevalence

Nearly 3,000,000 cases of communicable diseases are reported in this country annually, and of course many more are never reported. About half of these occur in children. These diseases furnish about 15 per cent of the total deaths. In addition to the deaths and the economic and social losses from cases, one must add the permanent disabilities resulting from communicable disease which may handicap the child through his entire life. From 50 per cent to 75 per cent of our crippled children owe their condition to infantile paralysis and tuberculosis. Blindness, damaged hearts and kidneys, increased susceptibility to other infections, are all found in the wake of communicable diseases among children. Economic and humanitarian motives alike demand that every known effective means of control be fully utilized and that further studies to increase our knowledge be expedited.

Medical Service

Adequate medical service readily available is fundamental for proper communicable disease control. Physicians are constantly making a noteworthy contribution to public health, and as the professional group who personally minister to cases of communicable disease, and by so doing, and by the instruction which they are qualified to give, reduce tremendously the possibility of infection.

PUBLIC HEALTH NURSING

Public health nurses can be, and are, one of the most important agents in the administrative machinery of communicable disease control. Through the home, the health center, the school and other points of contact, they can reach both parents and children in an exceptionally intimate way. They can assist in early detection of disease, in initiating procedures for prevention and in definite follow-up measures. The nurses are often the first persons with some knowledge of disease to see a real or suspected case and from their knowledge of control methods, as well as their intimate contact with the homes in the community, are able in a special way to give effect to community measures for control.

ORGANIZATION

There are certain fundamental matters which are of general significance in any consideration of communicable disease control. To be most effective we should have knowledge of the particular disease in respect to its causation, recognition, mode of transmission, and also concerning methods of active immunization and specific therapy. This means prompt reporting, particularly the first cases in an outbreak, when adequate isolation of cases and contacts gives the greatest promise of control. There must be an effective administrative organization with professional personnel that can furnish facilities for such services as the diagnostic laboratories, prompt investigation of sources of infection, suitable hospitalization, a consistent educational program aimed at raising and maintaining popular support for sound control practices, and resources for specific therapy. This means adequately trained, full-time health service for federal, state, urban and rural units. Without such facilities and personnel, all efforts toward the control of communicable diseases are handicapped to an extent that is but little realized outside of professional public health circles.

EPIDEMIOLOGY

Adequate organization requires provision for competent epidemiological investigation of every case of any communicable disease in which serious effort to control is to be made. A sound basis of control depends upon knowledge of each individual case, its source of infection, its contacts and potential contacts, as well as the social and environmental factors.

RECOGNITION AND REPORTING

The recognition and reporting of communicable disease is the first step towards control. For this reason, parents, teachers, industrial executives and others have a definite public responsibility to secure competent medical opinion under any suspicious circumstance. On the physicians must rest the special responsibility for the authoritative immediate reporting of the individual case.

ISOLATION AND QUARANTINE

To repeat, the isolation of cases and quarantine of contacts are most effective as control measures early in an outbreak, and therefore prompt and adequate reporting is especially important. But even so, it must be admitted that isolation and quarantine have proven to be profoundly disappointing in the control of the common communicable diseases of childhood. The first reason is because so large a proportion of the spread has been accomplished by the time the disease is recognized clinically. The second reason is that public support of isolation and quarantine of the familiar diseases of childhood is, in general, indifferent. For these reasons such artificial active immunizing agents as are available must be fully utilized, since a non-susceptible population is the greatest assurance against epidemics of a disease. However, it must be emphasized that selective isolation and quarantine which protect the young child from measles, the pregnant woman from scarlet fever, and the aged invalid from "colds" and influenza, are effective, and these procedures must be fully utilized until more effective means for prevention are known to us.

HOSPITALIZATION

Hospital facilities are essential: first, to provide a place to care for those sick with contagious diseases who cannot be cared for properly at home or who can secure better treatment through the facilities available in a hospital; second, to prevent spread of infection when contagious disease patients cannot be isolated effectively at their place of residence; and third, for diseases which are both highly virulent and highly communicable. Hospitalization is of particular value in breaking contact between cases and food handlers, particularly those having to do with milk and milk products. Hospitalization, except for treatment and in the special circum-

stances outlined above, is not necessary where proper isolation of the patient can be secured at home and the parents are cooperative.

PLACARDING AND FUMIGATION

Placarding of the premises where communicable disease exists is of some value in a few diseases. Otherwise it has no value as a control measure. Gaseous disinfection properly controlled is effective in killing insects and animals known to be capable of carrying or transmitting infection. Otherwise it is of no value as a control measure and has been abandoned by all public health officials who are abreast of the times.

Control of Carriers

The control of carriers is one of the most perplexing problems which confront health officers. A carrier of disease is generally taken to mean a person who carries the causative agent and can therefore communicate it to others, while he himself exhibits no characteristic symptoms of the disease. Most persons convalescing from disease are temporary carriers, but a considerable number of persons continue to be carriers when convalescence is complete, and some are found to be carriers who have no knowledge of ever having contracted the disease.

Both these groups create difficult problems for health administrators—the problem of discovery, and the problem of adequate control. In typhoid fever, the carrier problem is now seen to be of great importance in connection with its control, while for other diseases, such as diphtheria, scarlet fever, syphilis, gonorrhea, and dysentery, studies have shown the problem to be of greater significance than was formerly supposed.

Among the methods of control are: (1) Discovery of the carrier; (2) record of his occupation and movements; (3) proper instruction of carrier; (4) agreement on the part of the carrier (a) to refrain from handling milk and other foods, and (b) to observe certain personal essential sanitary rules; and (5) employment of any method that may lead to cure of the carrier condition.

Research

Increased knowledge is essential for increased effectiveness in control practice. This means generous, intelligent support of those

agencies situated strategically in regard to laboratory and field resources, for these agencies are our chief source of new information, and are most valuable critics of outworn practice. Such factors as etiology, mode of spread, specific immunization and therapy, the too little known economic and social factors in disease transmission and the like must be investigated, so that the health officer may have control measures of proven value for each disease, rather than the shotgun control so often ineffectively practiced at present.

Education

Finally it must be repeatedly emphasized that, except during an epidemic of a generally apprehended disease, when the public will tolerate and often demand police procedure, the health officer must depend for effective control on an informed cooperative public. Such a happy situation will result only from thoughtful, long-continued education. It would seem that this White House Conference on Child Health and Protection was most admirably calculated to contribute conspicuously in this field.

Findings and Needs Summarized

The outstanding facts brought out in this report are:

1. The knowledge of control in many communicable diseases exceeds its practical application. If all that is known about communicable disease control were generally applied, there would be a marked reduction in prevalence.
2. There are, however, many gaps in our knowledge concerning certain diseases, such as, the relative importance of the various factors contributing to the spread of disease, the specific causative agents, and many other matters which if known, would greatly simplify and focus efforts toward control.
3. Consequently, differences in opinion and practice exist concerning the procedures to be followed to prevent or diminish the prevalence of communicable disease. Such differences of opinion will be resolved only when more precise knowledge is available.

A few of the more important facts for consideration are:

1. The need for a more satisfactory determination of relative values of factors which control the spread of infection.
2. The necessity for well-equipped full-time public health service with competent personnel for urban and rural districts, with adequate community support and legal powers relative to all phases of preventive medicine.

3. Adequate compensation for those engaged in public health work that those qualified may be encouraged to enter the field.
4. Striking results have been obtained in many diseases so that yellow fever, cholera and plague are almost unknown in the United States. Smallpox, typhoid fever, and even diphtheria in some sections of the country are becoming rare.
5. Where the causative agents and methods of control of communicable diseases are known and these methods are used, they can be practically eliminated.
6. The greatest recent progress has been in the control of diphtheria and typhoid fever; in the former, because the interest of the public has been awakened, and because a preventive, which is specific and effective has been discovered, and in the latter mainly through general sanitary improvements, but also through personal immunization.
7. Some of the diseases which once took the heaviest toll of child life have been forced to occupy lower places in the list, so that those that now hold the place of greatest importance are diseases for which adequate means of prophylaxis or control have not been discovered. This indicates that there is still much to be done through laboratory, clinical and field research to discover better methods of prevention and control.
8. There is lack of effort and effectiveness in control practice in various parts of the country. Nevertheless, all States and most individual communities are showing an increased interest in the control of communicable diseases by gradually adopting approved methods and practices.
9. The best practices for the control of each communicable disease so far as known have been summarized in the body of the report and are therefore not repeated here.

Recommendations

It is recommended that:

1. Provision be made for the establishment of well-organized health departments with full-time trained personnel having facilities for rendering aid in diagnosis, making epidemiological studies, giving information and aiding in the prevention and control of communicable disease in every city and rural community in the United States and that sufficient funds be provided to make this possible.
2. As in rural districts only 505 counties representing 24 per cent of the rural population of the United States have full-time health service, an effort be made to provide the other 76 per cent with such service as soon as practicable.

3. To avoid confusion and in the interest of effective administration, a united effort be made to have adopted, as far as practicable when climatic, geographic and other local factors are taken into account, uniform rules and regulations for the same disease. All rules and regulations should be based, not on tradition, but on the practical needs and possibilities as determined by experience and scientific investigation. Such rules should differentiate in their application between immune and susceptible persons, and, where differences of communicability exist, between adults and children.
4. For the diseases among children for which specific means of immunization are available (such as smallpox and diphtheria) continuous programs be carried out until the more desirable method of making immunization a part of the routine care of the infant by the family physician has become the rule.
5. The value and necessity of protection from disease be made not only part of the pre-school and school health program, but also that it be brought prominently before the adult population at favorable opportunities.
6. All communities be urged to safeguard their people by properly providing facilities for the adequate supervision and treatment of their milk and water supplies and satisfactory disposal of human waste, because of the interrelationship between these and the spread of intestinal diseases including typhoid fever.
7. Encouragement be given to the improvement of housing and working conditions and of recreational facilities because of their relation to child health.
8. Adequate hospital and other facilities be provided for the care of patients with communicable disease (including tuberculosis, gonorrhea and syphilis).
9. Provision be made for an adequate public health nursing service, because of the usefulness of public health nursing in the administrative control of communicable disease.
10. Facilities be provided to avert or reduce to a minimum the disability which may ensue from those communicable diseases such as infantile paralysis which are prone to cause serious after affects.
11. Practicing physicians, local, state and federal authorities cooperate fully in giving prompt information about communicable disease cases which may contribute towards control or add to our knowledge.
12. Medical schools give more attention to the training of their students in regard to the public health responsibilities of physicians.
13. On account of the importance of the carrier in the spread of certain diseases efforts be made to discover and properly control such sources of infection.

14. The control of communicable disease be unified under the local health authority. In anticipation of epidemic emergencies all resources for control be organized for prompt mobilization under the local health authorities.
15. The satisfactory control and prevention of disease requires precise knowledge of the cause, recognition and modes of spread of communicable diseases. This knowledge is lacking for many diseases, it is therefore recommended that investigations in the laboratory, at the bedside, and in the field be promoted.

It is further recommended that:

1. Laboratory and field research be carried on for those diseases for which satisfactory means of prevention and control have not yet been discovered. Adequate funds should be made available for these studies.
2. Studies of communicable disease be made by competent persons provided with opportunity for intensive epidemiological observation on a significant number of cases in different communities, in an effort to determine improved methods of control.
3. While it is recognized that the field of studies needed in the control of communicable disease is practically limitless, and while it is recognized that many fundamental studies are now under way, the Committee realizes that the value of its recommendations will be increased if specific lines are suggested. It therefore presents the following as illustrations.

   (a) Meningitis—Studies should be made to discover means of detecting susceptibles, and to determine the minimum requirements to control epidemic spread.
   (b) Scarlet Fever—Continued studies should be made on the value of convalescent serum, on the production of immunity by inunction, on the advisability of releasing adult cases earlier than child cases, and on the practical use of release cultures.
   (c) Syphilis and Gonorrhea—Studies should be made to determine how much can be done to control venereal diseases. These studies should involve their clinical, laboratory and epidemiological aspects.
   (d) Whooping Cough—Further studies should be made on the use of vaccines and diagnostic cultures as well as other possible control methods.
   (e) Tuberculosis—(1) Studies should be made on the home treatment of tuberculosis not as supplanting but as supplementing hospital care and treatment.
      (2) Systematic examination of school children in 3, 6, 9 and 12th grades, using tuberculin test and X-Ray.

(3) Special study of causes of high death rate for adolescent girls (12–21 years) with all relative information.
(4) A tuberculin test with X-Ray of at least 1,000 girls in different industries, compared with like groups in high schools.
(5) Study of incidence of tuberculosis infection among children, beginning with infancy and following through to adolescence.
(6) Study of tuberculosis problem among colored. (Negro death rates from tuberculosis are not declining in northern cities).
(7) Further study on the chemistry of the tubercle bacillus.

(f) Poliomyelitis—Further studies are needed on the adequate control of this disease.
(g) Hookworm—Surveys should be made by the egg counting method to determine the present status of infestation with hookworm, to evaluate the present importance to health of children and to stimulate extension of environmental sanitation.
(h) Trachoma—Further studies should be made on its etiology, prophylaxis and therapy.
(i) Common Cold—Additional studies are urgently needed.

4. Studies should be made to determine the value and methods of general use of convalescent serums for prophylaxis against measles, chickenpox, mumps, and possibly whooping cough.
5. As much of our knowledge of disease and its control has resulted from properly conducted experimentation on animals, there should be no attempt to restrain the use of animals for this purpose, so long as the experiments are conducted with due regard to the sensibilities of the animal used as well as to the benefits accruing to both human beings and animals from such experimentation.
6. Studies should be specially directed toward the most direct and reliable means of discovering carriers of disease, and the most satisfactory methods of curing or otherwise effectively handling those discovered.
7. The state, city and rural health units, the communicable disease hospitals, laboratories in medical schools and colleges, as well as those institutes established by the United States Government and philanthropies for research work, should be encouraged and feel it their duty to make investigations of communicable diseases and improved methods for their suppression.

C. COMMITTEE ON MILK PRODUCTION AND CONTROL

The Report of Section II, Committee C, On Milk Production and Control, was received too late to be included in its proper place. However, it will be found at the end of the volume.

SECTION III

EDUCATION AND TRAINING

A. COMMITTEE ON THE FAMILY AND PARENT EDUCATION

THE first, and still the most important agency in child development and education is the family. The prolonged period of infancy of the child made necessary some stable group to insure proper physical care. The longer plastic period made possible a high degree of education which placed increased responsibility on this group and offered increased reward and emotional satisfaction. The family, originating in the necessity of the young, has come to offer adult members of society the possibility of the highest satisfactions in life. Parents find in the development of the younger members of the family circle a means of self-expression and an extension of themselves into the future. This family has taken different forms to meet the needs of different races, cultures, and changing economic and social situations. These changing family patterns have been much discussed and analyzed, but always the basic functions have been the care and training of the young, the nurturing of traditions, and the building up of an adult family life which will send out individuals better able to face life than were their parents.

It is thought at present that the family is undergoing definite and rapid changes. Statistics on marriage, divorce, size of families, and proportion of births in the population, seem to indicate disintegration of the older family life.

Certain unmistakable trends in our modern industrial civilization are undoubtedly influencing family life. Increased technology decreases the satisfactions and interest of work and the utilization of human energies, thereby affecting the permanence and stability of employment. The location of factories in or near cities subjects a larger proportion of the population to the influences of urban life, while inventions extend these influences to wider and wider areas of rural life. Mass production and the easy dissemination of urban culture, together with the mobility of labor, tend toward standardization of culture and the loss of local colorization. Furthermore, all of these conditions of production and consumption tend to remove from the home certain functions formerly considered inherent in family life.

There is a considerable amount of symptomatic evidence available to support this interpretation of modern cultural trends in relation to the family.

On the other hand, there is evidence of a different sort that the family is not undergoing any fundamental change; that those functions which are being removed from the home are superficial in their nature, and that, when outside forces reach more deeply into fundamental family structure, there is resistance to their influence which will result in control of those agencies which impinge upon family integrity.

The fact that the family has survived to the present time is an indication that it fulfills deep-seated needs of the human race. Since its beginnings in pre-historic times, it has undergone many changes, including encroachments by the State, as in ancient Greek society. Whenever society has had to assume too great a part of the parental rôle in the care of children, breakdown in individual cases has seemed to prove the fallacy of the Platonic ideal. Institutional care has for the most part produced uninspired individuals, poorly adjusted to the outside world. Aristotle voiced the protest of human nature against impersonal and institutional care of the young in the following words: "How much better is it to be a real cousin of somebody than a 'son' after Plato's fashion!"

The almost universal dismay expressed at apparent tendencies toward family disintegration is proof of the significance of the family in human life. Child guidance and psychiatric clinics furnish evidence that serious maladjustment results in individuals who have been deprived by accident of self-identification in society through not belonging to a family, and also in those individuals who have become involved in a conflict between irreconcilable demands of family life and external social forces. Dr. James S. Plant (Plant, James S., A.M., M.D. The Present-Day Family and its Individual Implications. Unpublished manuscript of the committee) has expressed this evidence from the psychiatric clinic in support of the family as against social and cultural changes in the following words: "There must be much of real power in this refusal on the part of the members of families to give up the 'ideal.' Whether it is a factor that will tend to preserve what we think of as the family against the inroads of all that modern life means, or whether it simply connotes more serious personality conflict over changes that are inevitable, I do not know. As the sociologist envisages the inevitable changes, I feel that he

should recognize the psychiatrist's experience that there is widespread individual craving that these changes not occur.'' The sociologists, themselves, are aware of this craving. In the words of Dwight Sanderson (Science and the Changing Modern Family. Journal of Home Economics, V. 22, No. 10, p. 814), ''The question is, should the family be merely the product of a changing environment, adapting itself to it, or are there fundamental human values in family life which should be conserved and the environment adjusted to them?''

WHAT ARE THE MOST FUNDAMENTAL HUMAN VALUES IN FAMILY LIFE?

It is impossible in our present state of knowledge definitely to answer this question, but there are indications that these fundamental human values in family life are the product of the interaction of personalities within the family. While the physical environment, the cultural background, and the social status of the family undoubtedly aid or deter the development of the individuals in that family, the production by homes which would be rated poor according to these criteria of useful, successful, and fine individuals proves that there is something more important in the home than modern plumbing and period furniture. A study of delinquency in North Carolina has showed a slight correlation between delinquency and the non-ownership of homes. Environmental factors in juvenile delinquency have been studied by various agencies, notably the Crime Commission of New York State (A Study of Environmental Factors in Juvenile Delinquency by the Sub-Commission in Causes and Effects of Crime, 1928), with an increase in our knowledge of pre-disposing causes of delinquency. However, the fact always remains that good children grow up side by side with the delinquents in the same environment. Often in the same family there are well-adjusted and poorly adjusted children. The deciding factor must be the interplay of personalities within the family group.

There has not yet been developed a technique for the measurement of these intangible personality factors within the family which so greatly influence the development of the child. The need for such a technique is recognized, attempts have been made to provide it, and some preliminary steps have been attained by this committee. Through an interview study of 50 well-adjusted and

50 poorly adjusted children a beginning has been made in setting up a measure of the more intangible influences of family life. In another study, of 9,000 American school children by means of a long and inclusive questionnaire, a relationship has been found between the degree in which children confide in their parents and such other factors of family life as group celebration of holidays, recreational activities in common, the type of control exercised by the parents over the children, the source of first information about sex, and the general personality adjustment of the child. There is at present no exact measure of personal relationships. The family must depend for guidance upon the principles of human behavior as they have been interpreted in the fields of psychology, psychiatry, and mental hygiene.

According to these principles, the ideal family would provide for the child a friendly and hospitable environment for the development of his emotions and abilities, a secure relationship in a group of dignified social status wherein he was loved, protected, and encouraged. The child wants to belong to a family, to have his own name, his own parents, his own things. He wants his family to be as good as his friends' families. He needs the affection, the security, and the encouragement of his family to fortify him for successful contacts in the outside world. If his parents are happy in their adjustment to each other, if they are working hopefully toward the fulfilment of an ideal of living, if they love their children with a sincere and unselfish love, in short if they are well-balanced individuals, gifted with a certain amount of insight, they are apt to provide the child with a wholesome emotional background which will contribute more to his development than mere material advantages. Such an equipment for parents implies a deviation of educational ideals and practice throughout the educational system from the exclusively informative and utilitarian instruction toward the development of an appreciation of values in human life. We have had in all education too much teaching of facts, too little development of individuals.

It is impossible to separate the emotional satisfactions of family living from the more tangible functions that the family performs. These satisfactions permeate the whole texture of family living. Any analysis of family functions should be approached with this thought in mind.

FUNCTIONS OF THE FAMILY WITH REFERENCE TO THE CHILD

After a careful study of the literature on the family, the committee has classified the functions of the family in four main categories. The classification—control of environment, inculcation of social values, orientation, and regeneration—is not important if a picture of what the family does is obtained. The importance of some of these functions is self-evident—they are necessary for survival. As for the others, there is at present no scientific proof of their relative importance. At least the performance of all these functions is desirable; and a slighting of one would require compensation in some other aspect of family life.

Control of Environment

The family as status giving provides the child with his name and his status in the community. Less stringently than formerly is his permanent social status determined by that of his family. However, it is essential to the stability of the child that he be satisfied with his name and his status in the community. Any marked difference in his family from the families in the community in regard to social, racial, or economic factors is tremendously important to the child. Sometimes he compensates for a resulting feeling of inferiority through forms of behavior which result in delinquency. Sometimes the standards of the community which he desires to emulate are inducive to delinquency. If the child through confidence in and respect for his parents can be made to believe that their deviation from the surrounding family patterns is right, the child's conduct will be swayed by the standards of his own family rather than those of the community. In other words, family relationships can be a means to offset the effects of an unfavorable environment.

The physical survival and security of the child are dependent upon the protective control of environment by his family. Such protection begins during the prenatal period and extends to adulthood, when he ordinarily leaves his parental home to form one of his own. Its implications embrace participation in community and national government on the part of the family whereby fire, police, and similar protection are provided, and both individual and public health safeguarded. It involves knowledge on the part of the parents of physical care, nutrition, hygienic living, and the pre-

vention of disease. It requires medical and dental supervision, adequate shelter and clothing, pure milk, pure water, fresh air, and protection from accident. It further requires the inculcation of good health habits in the child through the parents' example and instruction in order that a basis for health may be laid by correct habits of eating, sleeping, and elimination. The first educational efforts of the home are directed toward the establishment of these simple, fundamental physical habits.

Most of the requirements for physical survival and security can be controlled through the application of knowledge at present available in the fields of health and sanitation. The progressive standards set by specialists in these fields should be utilized by the family to the extent of its economic ability.

Fundamental to the very existence of the family is its economic status—its ability to provide a continuing adequate income, and to expend it wisely. A basic income should be within the attainment of each family to insure the minimum standards for survival and security. This is an economic problem of national scope. A nation that values its future development will take steps to see that this basic income at least is available to all its people.

Inculcation of Social Values

The family has in the past been the main channel for the transmission of culture and a major source of intellectual stimulus. Especially in the first of these functions is the family of today accused of failure. There is evidence that in the rural districts of this country, and in certain families of established income, the family still serves in the transmission of culture. This is desirable if differences in individual and group culture are to be maintained. In those families, however, that through urbanization and migration according to the present demands of industry have lost contact with the larger family, and have made no permanent local ties, there is need for help in the performance of this task. As various agencies take over certain functions of the family, they must also assume the responsibility of transmitting social values and culture. The school, the social center, the visiting teacher, the visiting nurse, the juvenile court, the lawyer, and the doctor, must be prepared to hand on knowledge of human values as well as the special content of their contributions. Even the commercial companies that provide equipment, furnishings, clothing, and food

products, formerly manufactured in the home, should feel a responsibility not only for the quality of their materials and their adaptation to home use, but also for the quality of the information they disseminate about them.

Under the old order, ideals and practice of child care and training were part of the cultural inheritance transmitted from one generation to another by the family. With the present interruption of the chain of such direct cultural inheritance, parents feel an acute need for help in meeting the problems of parenthood. In direct response to this need the parent education movement has arisen, which will be more fully described later in this report.

Although the child may no longer receive much actual instruction, or training in skills, in the home, the parental attitude toward learning can still afford intellectual stimulus. Eagerness to learn and hunger for truth on the part of the parents are a stimulus to the child no matter how poor the home nor how inadequate the training of the parents. Willingness to answer questions, encouragement of constructive play, and the study of nature together are family practices stimulative to intellectual development. Sympathy with the child's intellectual interests encourages him to further efforts; and if parents are interested in the education of their children, their interest should extend to an understanding of the schools their children attend and a knowledge of modern educational trends.

In the physical plant of the home the education of the child can be furthered by providing him with the facilities for study—a place to study in uninterrupted privacy, materials for developmental activities, both intellectual and recreational, pets, materials and instruments necessary for practice in the arts, and books and periodicals. Although it is important to teach the child to live in his own modern environment rather than artificially to re-create household activities of a previous age, there are many educational values to be attained through participation in household activities. Besides furthering his education, a room of his own satisfies a need of the child for a place to keep his belongings where he will be undisputed master of his surroundings.

Aside from the purely intellectual stimulus, the basis of aesthetic taste and appreciation seems to be laid in early childhood. Although tastes can be altered in after life through education in aesthetic values, people seem naturally to prefer the types of things that were found in their early surroundings. If this fact

were more widely recognized people would be more careful of the type of literature read and discussed in the home, of the music selected over the radio or provided instrumentally, of the pictures in the home, of its furnishings and architecture. Except in cases of abject poverty and squalid surroundings, good taste can be displayed in the home through observance of some of the fundamental artistic principles.

Clothing plays an important part in such artistic training. The aesthetic satisfaction from well-selected clothing, and its psychological significance, particularly during adolescence, should be taken into consideration as well as economy and utility.

The speech, vocabulary, and voice of the individual are largely a product of early associations. Bad habits of speech acquired in childhood may be a lifelong handicap.

All of these factors help to determine the finished personality of the individual, the external self by which he is known to the outside world, and affect his enjoyment of life.

Even more fundamental to personality development are the ideas about sex, marriage, parenthood, and family life that a child absorbs from his family. Happy is the child who is born to well-adjusted parents who naturally inspire confidence and affection and provide through the example of their living a serene and wholesome environment. There is much literature available on sex instruction for children and adolescents. It is generally advised that such information be given truthfully and frankly on the level of the child's intellectual development. The study of school children made by this committee would indicate that a parental source of first information about sex is tied up with personality adjustment and emotional stability. However, the important thing seems to be to give such information as one has frankly and without hesitation. Here again attitudes are significant. Emotional life is too complicated for any one individual to be comprehensively wise in his judgments and advice. The parent fulfills his part by generously and frankly sharing his experience, and by providing the example of adjustment in his own life as far as possible.

This committee firmly believes that instruction should be provided by schools and colleges to further the satisfactions of intelligent participation in family life and to prepare for courtship, marriage, and parenthood. However, as long as the family exists as a unit, the initial impetus toward adjustment or maladjustment will be provided in the home life of the child.

Orientation

During the first few years of life the child learns to extend his interests and affections to include first the members of his family and then an ever-enlarging circle of friends and acquaintances. This is the socializing aspect of his early life. The most intimate of these early relationships are those existing between the parents and the child. Through these relationships the child learns values of authority and personal liberty. If there are other children in the family, the child's social experience is broadened to include adjustment to the needs, interests, and desires of others near his own age. There is opportunity for both harm and good to result from these brother and sister relationships. It is thought that age-position in the family influences intellectual and emotional development. If the child comes through these adjustments with his self-esteem intact and a realization of the importance of give and take in human relationships, he has developed through experiences that are denied the only child. Gradually through the outside associations of the family the child learns, according to family attitudes and his own reactions, to adjust himself to unrelated persons. Friends of the parents and older children tend to exert an influence on the development of poise, culture, and social ease. From his own age-group he learns those social patterns which will help him to fit into the life of his contemporaries, advance his emotional and intellectual satisfactions, and attain a measure of success in his life work consistent with his abilities.

Through family attitudes again, the child learns his philosophy of life, his concept of God, and his scheme of the universe. This orientation is integrative. It is essential to continuing stability. At first the security of his home and his confidence in his family satisfy his doubts and fears concerning the ultimate rightness of things. As he approaches adolescence he requires intellectual justification of his beliefs. As in the case of sex education, family attitudes are more important than actual instruction. High ethical and moral standards in the family, together with honesty in the expression of doubts and beliefs, form a wholesome background for the child's development.

The family assists in the orientation of the child to life through helping him interpret experience and directing activities. Supervision of play and associations with other children, direction of

work and guidance of interests greatly influence the ultimate goals of his life.

As the child grows into adulthood he carries with him a strong coloration of his thinking on social and political questions gained from family attitudes. These attitudes are closely associated with the early emotional satisfactions or disappointments of his life, and are difficult to change. A well-integrated family provides the best possible nursery for altruism, disinterestedness, ethics, and humanitarianism in social attitudes. Unless society can provide a satisfactory substitute for such an affectional hot-bed, these qualities will with difficulty be widely implanted by any agency other than the family.

Regeneration

Within the family the child naturally finds intimacy and affection that provide a sense of security and emotional tone in his life. Family jokes, games, social customs, celebrations, and festivities shared in common strengthen the affectional bonds and contribute to the stability of the child. In such activities, he experiences the enjoyment of seeing the members of his family as human beings, interesting, likable, amusing, companionable, and not merely cooks, nursemaids, lawyers, artists, doctors, and school children bent on the accomplishment of their serious daily tasks. Recreation loosens tension and provides relief from restraint. Each member of the family finds in it an opportunity to be at ease in his enjoyment, free from the necessity of being any one but himself. Aside from the opportunity for learning first-hand certain useful qualities like unselfishness, honesty, and good-sportsmanship, family recreational activities are a regenerative influence in contacts with the outer, more impersonal world.

SOCIAL FACTORS INFLUENCING FAMILY LIFE TODAY

The above enumeration of family functions makes little attempt to evaluate them according to their importance to the existence of the family. What evidence the committee has been able to collect supports the opinion of mental hygienists that personality factors are the most important element in the effective functioning of family life. Whether these personal relationships can continue to be effective in a different home environment than that provided by the family heretofore, and whether present cultural trends are

actually threatening the essential nature of the family are important subjects for further research. Social factors which undoubtedly bear upon the structure and functioning of the family and tend to vary the family pattern are: professional or occupational status of working members of the family, race, nationality, geographic distribution, and density of population.

From the study of the home environment of 9,000 school children made by this committee, it is apparent that the occupational status of the family rises in relation to the socio-economic rating of the home, which was to be expected. Another study, based upon census population figures, shows that occupation affects the size of the family and the age of marriage, largely through its influence on economic status. Marriage is earlier and families are larger in cities which are predominantly manufacturing, and farm families are larger than those of others in rural communities.

Evidence from several committee studies indicates that the Negro approximates the native white in his family pattern, and that there is a greater difference between rural and urban family life than between Negro and white.

Foreign-born families tend to continue their rural pattern even when living in cities, if they originally come from a rural culture. Foreign-born families of essentially urban culture, such as the Russian Jews, approximate the family pattern of the native urban whites.

The study of the relation of density and aggregation of population to the family made for this committee, which was mentioned above, presents some interesting findings: The per cent of married population over 15 years of age increases as the size of the community decreases. Marriages without issue are more common in cities. The size of the natural family living at home decreases as the size of the community increases, and the total number of children born has the same trend. The differences with regard to marital and family phenomena between communities of different sizes are complicated by differences in the relative proportions of the sexes, in age distribution, in nativity and race. These factors must be eliminated before fair comparisons can be made.

The ratio of the excess of families over dwellings increases with the size of the community, and the per cent of homes owned decreases. Single dwellings decrease and multi-family dwellings increase with the size of the community.

The city family moves more frequently than the rural family,

and the per cent of those who stay in the community of their birth seems to be inversely correlated with the size of the community.

The number and per cent of families with native white mothers gainfully employed outside the home increases with the size of the community. From 1890 to 1920 the number of married women employed outside the home in non-agricultural pursuits increased more rapidly than the number of unmarried women so employed, and the larger the community the more rapid the increase. The number of children for mothers employed outside the home, in unbroken families, is smaller than that for mothers not so employed, and this tendency is particularly marked in cities.

The number of illegitimate births increases with the size of the community.

Divorce increases with the size of the community.

An outstanding result of this study is the revelation of the lack of published data on marital status, age of marriage, size of family, number of children ever born to a wife, divorce, and so on by the federal census, particularly for the cities under 25,000 inhabitants, villages and farms; and the importance of the tabulation and analysis of the data secured by the census so that the phenomena of family life as affected by size of community, nativity, race, geographical environment, and so on, may be adequately and accurately determined.

These findings seem to justify a pessimistic outlook for the family in an urban industrial civilization. However, in contrast to them is the evidence from the study of the 9,000 school children that city children are better adjusted than rural children. An interesting feature of all researches on the family is the resistance of the rural family to change. A recent study of the attitudes of 13,431 rural people made by a farm paper (Lord, Russell. Cross Section of the Rural Mind. The New Republic, Vol. LXIV, No. 825, pp. 146–151) has shown them to be disinterested in money matters, antagonistic to social change, and staunch in the maintenance of older ideals of family life, of religion, morality, and ethics. The apparent discrepancy between the picture of the "stable" family presented by rural culture and the poorer adjustment of rural school children seems to warrant a conjecture that there are aspects of the older family pattern which not only could but should be changed. These desirable changes are probably related to the authoritarian and undemocratic parental attitudes of the old-fashioned family. But in the absence

of scientific proof and on the basis of further conjecture, the disinterestedness to material gain and the ethical viewpoint of rural people may have a compensating value both to the individual and to society, while the rigors of rural family life may offer an incentive to accomplishment. Modern inventions have already reached the farms. In some regions their work is largely mechanized.

These rural people display a lively interest in human relationships and in social and political matters. Questions arise: to what extent in the future will they be influenced by the apparent social trends in urban centers; and if they continue to resist, to what extent will their resistance affect the culture of the country as a whole? Clearly, in the face of contradictions in philosophy and in the findings of research, a refinement of technique and further research are necessary before even a partial understanding of the problems of the family and their effect on child development can be reached.

INFLUENCE OF ECONOMIC FORCES ON FAMILY LIFE

The basic factor in the determination of the physical environment of family life is the family income, expressed either in terms of money income or family labor, or usually a combination of the two. There is need of research to determine more definitely the basic income for the maintenance of an adequate family living, and the amounts necessary to provide adequate care for the children of various ages. Physical survival and health are dependent upon physical surroundings, and favorable physical surroundings cannot be provided on inadequate incomes.

In early days when each family produced by its own labor its own living, there could be more direct control of the standards maintained. As division of labor has developed into our present industrial system men and women work for wages with which a large part of the family living is purchased directly. Buying the living rather than producing it in the home has brought problems to which our education has not yet satisfactorily adjusted. At the same time there has developed a tendency to depreciate the contribution of home labor in adapting the income to family need.

Wise spending increases the returns from any income, but below a certain level intelligent spending is impracticable because

of the ignorance imposed by poverty. The physical urge is so great that basic physical needs must be first supplied, and nothing is left to spend on those items making up the field of choice and contributing toward education, emotional satisfaction, and the mental health of the family group. It is not strange under such circumstances that satisfactions tend not to rise above the physical level. The basic income should be sufficient to provide not only for the physical survival of the child, but for his education and for family recreation. As the income increases greater opportunities are available, carrying with them greater dangers and greater responsibilities for wise spending.

But economic forces have reached further into the home. The factory has taken over much of the work formerly done in the home, requiring in return more money from the family pocket, shifting the family needs more to money income, less to family production. This has meant for many families more than one wage earner, the increased employment of women and children, for not only must these industries be paid, but workers supplied. Many of these women carry a double job—industry and the homekeeping. Other women stay in the home with a part-time job and resulting dissatisfaction. Some elaborate the remaining jobs to make them seem more worth while. This has resulted in the establishment of competitive standards in housekeeping opposed to real standards based upon real needs. Elaborate procedures for housekeeping have been established and wants multiplied. Unscrupulous producers and distributors have used and even stimulated these to increase sales and inflate prices.

All this has meant increased urbanization, homes located around factories and work places, near sources of supplies and services, the growth of apartments and flats, less space per person, less privacy, less family entertaining, more dependence upon outside sources for amusement, fewer children.

Also, the cost of a child has increased in this age of specialization. Bertrand Russell ("Do Men Want Children?", The Parents' Magazine, Vol. V, No. 10, October, 1930, p. 14) says: "Consider the money that well-to-do men spend on acquiring and rearing children. There is first the expense of the confinement, then the expense of more house room, then the prolonged and heavy expenditure upon education, and finally, especially in the professional classes, a serious burden for life insurance. All this expenditure, except for those who are very rich, means a real cur-

tailment of personal pleasure, and would hardly be incurred if men did not desire children."

These economic trends are thought by some to threaten the family and modern civilization unless the home adjusts to them at any cost. Another point of view is possible. How may these changing economic factors be used to conserve and strengthen fundamental human values in family life? The relation of these factors to family life is worthy of the same careful consideration that has been given the study of conditions of production in relation to industry and commerce. Machine age culture is not necessarily inimical to the enjoyment of the best of life's values. When the machine is a servant of man it increases his leisure, improves the comfort and safety of physical living, provides a large and varied field of activities for recreation, increases the accessibility of these activities, and furnishes means for the rapid spread of knowledge.

A production program based on consumption needs would bring about a better fit between goods produced and goods used, to the advantage of both producers and consumers. It would stabilize the market and help obviate such conditions as changing wage scales, unemployment, and migration of population, which tend to give to urban family life its most objectionable features. Steady production for a stable market, resulting in regular and continuous employment, would make possible the financial security necessary for a stable family life. Such conditions of economic stability would enable the worker to establish a permanent home in one locality where family status, credit, home ownership, and continuous social relationships would furnish a degree of assurance that the future of his children would be provided for, and would give to the child that feeling of security which helps to make him a well-adjusted and contributing member of society.

HOUSING AND MANAGEMENT OF HOME ACTIVITIES IN RELATION TO CHILD DEVELOPMENT

We have summarized above the functions of the family. We have traced the influence of certain social and economic forces on family organization and the home in which family life finds its expression. We have called attention to the wide gaps in information available and the need of study of the social and economic problems as they relate to the family. We now come to the con-

sideration of the home itself, the management and direction of its expenditures and activities and the part they may be made to play in the development and education of children. Again we wish to assert that the home is conditioned by the income, either in terms of money or available labor. Wise direction of both of these may increase the enjoyment of real values in living. Family discussion of the family budget, and the wise use of time in the household develop cooperation and family solidarity. They are also valuable means of teaching fundamental economic and social values.

Standards have been set up on the basis of the best present knowledge, to help guide the expenditures for the main essentials of living: food, shelter, and clothing. It is difficult to set up the actual amounts required in any very definite terms. An effort has been made to determine the minimum expenditures to provide adequately for children. These, too, vary in different localities and with different family circumstances.

Housing standards have been set up in some detail. The single family dwelling has definitely certain advantages. It is more costly in the beginning; it is usually more costly in effort for maintenance. These factors must be balanced. Many of the advantages of the apartment can be applied to the single dwelling without sacrifice by more constructive thought to grouping of homes with certain common features. Home ownership would seem to have a value in that it strengthens the feeling of stability on the part of the child. This needs, in some instances, to be balanced against sacrifices which may be imposed upon the family in its purchase. Unquestionably the financing of home ownership is one of the problems which needs considerable study.

Food is a basic physical need. The Sub-committee on Nutrition of the Committee on Growth and Development has brought together the basic facts in regard to the food needs of children. Definite figures can be set up for the cost of food. We know the relative amounts of food consumed by children in relation to adults. We know the food group from which selection should be made in order to provide basic nutriment for children. We appreciate the importance of flavor, palatable preparation, and attractive service in pleasing surroundings.

Whether the mother cooks it or not is unimportant provided she is in close enough contact with the producer to know the quality and composition. It is not even essential that it be cooked in the home. More important from the point of view of family integrity

is the service of the food. The family dining table furnishes a means of recreation and a bringing of the family together which unquestionably have an important influence on family life.

Standards for clothing expenditures have been more difficult to establish since less real information is available. Clothing is not so definitely related to health, although we are coming to realize that there are relationships here which have not been worked out. There is considerably more variation possible in the cost of clothing than in food. Much of this cost does not represent real value.

Clothing does, as we have seen above, contribute to the aesthetic development. We know also that by more thought in its design it can not only be made comfortable and more healthful, but the child can put it on and off at an earlier age and with greater ease. Such activity on the part of the child not only saves the time of the mother, but more important, helps give to the child a sense of accomplishment and independence through which basic development is obtained.

Health, recreation, and certain aspects of education are closely tied up with the expenditures for the basic needs listed above. Proper food, shelter, and clothing are, as we have said before, essential for health. By the direction of the choice of these we lay the foundations for health. A certain amount should be laid aside for the necessary payment to health agencies for the general supervision which is necessary and occasional necessary care. The study of the cost of specialized aspects of health has been a subject of study for several years by the Committee on Cost of Medical Care.

Our studies seem to show that family recreation contributes to family solidarity. This does cost, but considerably less than some of the specialized types of recreation which have come to seem necessary. There are values, however, associated with recreation which should definitely be taken into consideration and often far outweigh their cost. Education should be provided for up to the limits the child needs and the family can provide. Here again we find great variation and should approach with care.

Home activities do vary. The extent to which they should be retained in the home must be determined by a balance between (1) amount of household labor available, (2) uses for time if released from household activity, (3) availability of this service and quality and economy of such outside service. Unquestionably too much significance has been attached to keeping in the home some

of these traditional activities. Many women make their best economic contribution in housekeeping and find in it the best means of self-expression. But if a woman can earn enough outside to pay for the goods or services she would produce in the home and get more enjoyment in this outside work she is better able to carry out her homemaking responsibility to the family. Many mothers are better homemakers if not held on the job 24 hours a day. No woman can carry full-time both housekeeping and an outside job. There is need of developing further housekeeping services to the home, and of study of the jobs for women to see how they can be adjusted in total time and hours to interfere least with homemaking.

These home activities have been looked upon as a means of educating children in the home. Giving the child actual jobs to do does develop independence, cooperation, and a feeling of accomplishment, as well as a certain amount of vocational competency. The extent to which activities need to be kept in the home for this purpose is a matter we seriously question. In a study of rural homemakers made by the Federal Bureau of Home Economics (Kneeland, Hildegarde. Time Spent in Work by Farm Women. Yearbook of Agriculture, 1928, pp. 620–622), it was found that traditional home organization and most of the home activities were still retained in the home. In a typical study, a total of 48 hours each week was devoted to housekeeping, food, the house, and clothing. Two and one-half hours were given to the care of children and other members of the family. Almost three hours were devoted to purchasing, planning, and management. A different picture would be obtained from the urban homemaker making use of the many devices available to her. Something of a reflection of this is found in the committee study of the home activities of children referred to above.

It was found in the study of the 9,000 school children made by this committee that rural children engage in more activities round the home incidental to the business of the home than city children. Many of these activities were characteristic of the farm and could not be engaged in by city children; but, even eliminating these, the rural child performed a given task more frequently than the city children. This does not imply that the city child is less busy than the rural child; he has more friends, he goes oftener to their homes, they come oftener to his, he goes oftener to the movies, and he has more instruction in the arts. It would be expected according

to the older tradition of family life that the rural child was better integrated into the family life. Although the data are not conclusive, the results of this study seem to show that quite the opposite is the case. The rural child confides less often in his parents, he less frequently gets his first information about sex from his parents, he less frequently enjoys recreational activities with them, and his personality is not so well adjusted as that of the city child. But in spite of this rather inconclusive evidence, it would seem that a certain amount of participation in family duties and activities on the part of the child would be advantageous to his development. All the factors in the family situation of the rural child should be taken into consideration before final conclusions are drawn. There is possibility that in some cases he is being exploited. Also, recreational opportunities seem to be lacking for the rural child.

There are in the modern home many activities in which the child can still participate. The study by the Bureau of Home Economics shows that the urban housewife spends more time in the performance of household duties than has commonly been suspected. Children can help in dusting, cooking, setting the table, washing dishes, making beds, mending, sewing, carpentry, household repairs, electric wiring, and so on. They can assume a certain amount of the burden of shopping and running errands. If there is a yard or a garden, they can help in planting flowers and vegetables and in caring for the lawn. Although it is important to teach the child to live in his own modern environment, rather than artificially to re-create household activities of a previous age, there are many values to be obtained through participation in legitimate household activities. Such participation fosters a cooperative spirit and unselfishness. It provides experience in management, in the budgeting of time and money. It teaches certain specific fundamental skills useful in an emergency, if not necessary to daily living.

SPECIALIZED EDUCATION

The surest means of meeting social maladjustment is by education. The very fact that there is at present a conflict between family tradition and active social and economic forces is an indictment of our education in the immediate past. It has either not

kept up with the times in furthering adjustment to changing conditions, or it has not provided the insight necessary for resistance to the operation of inimical forces. There has been perhaps too much emphasis on giving information and educating the individual to make a living, and not enough on educating him to live. As industrialism and efficiency are carried over into education, it is important that vocational competency should not be stressed to the neglect of education for living. There is need of widespread teaching of ethics and human values. Although there is a present-day theoretical emphasis on the value of individual human life, too often in practice that value is ignored. Under an older system of classical education, true democracy and the lot of the common man were theoretically ignored, but a large class of people were trained in ethical standards of disinterested service. We have need today of training in artistic appreciation and creative expression, in the use of time, in the art of living, and in human relationships. Such training would shift our sense of values, provide for profitable use of leisure time, and add to human happiness.

Much of the subject-matter taught in our schools merely needs a shifting of emphasis to vitalize it. In addition, guidance and specific instruction should be provided in preparation for family life, ultimate marriage and parenthood. Such training is being provided in many schools and colleges through personal guidance, curricular instruction, and the direction of extra-curricular activities. In addition to this pre-parental training, there is need for an appreciation of human relationships, and specific training in mental hygiene and human behavior, for all those individuals who touch the home or the child in a professional capacity, such as doctors, nurses, teachers, lawyers, social workers, ministers, and so on. The need for such training is gradually being recognized, and courses are already being provided in various professional schools.

An educational program such as that described above, to be effective, would have to be carried on over a long period of time. Even if this ideal were generally fulfilled in practice throughout the educational system, there would perhaps always be necessity for supplementary training for parents to help them meet the actual problems of child-rearing as they arise. A movement to provide such training has within the past few years become a significant educational force. Because it bears such an important

relation to the family in its present state of unrest, it will be treated in considerable detail.

Home economics education is commencing to meet its responsibility to educate for family life. Developing as it did as a part of the vocational movement, it tended first to emphasize the productive aspects of homemaking. Now the point of view is shifting. Home economics courses, along with a certain minimum of basic information, aim to give the student a point of view which will help her in the integration of the various courses in fundamental sciences and their application to home and family problems.

From the point of view of the sociologists a definite challenge is given: "Is the time not ripe to lay the foundations of a new and separate science of the family? The present trend in the evolution of Home Economics would seem to indicate its possibility. Beginning with the application of science to the technology of the arts of the household with regard to food, clothing, and shelter, the science of home economics found that after all the home could not be made satisfactory, however good its material conditions, without a knowledge of the child, so the psychology of the child was given a place in its field of labor. Finally, when child guidance was attempted, it was found that the child's behavior is chiefly conditioned by its life in the subtle complex of personal relations which we call the family. So a knowledge of the family and of its intricacies and relations became the central problem in a scientific approach to the home."

Home economics must cross-section the various sciences in the solution of its problems. Home economists are working with specialists in different scientific fields toward the solution of home and family problems. Slowly but surely the results of this research will be reflected in home economics teaching through both the schools and the colleges.

PARENT EDUCATION

Parent education is a means by which all the problems facing family life are brought into conscious consideration, traditions are evaluated in the light of present-day living, and new techniques and methods of adjustment are evolved.

The parent education movement had its beginnings in the late years of the nineteenth century when small groups of mothers came

together to discuss the problems of rearing children. During the last decade of the century, three national organizations were launched for the purpose of studying the needs of children and of developing a more intelligent parenthood. A few years later an extension service in home economics was developed in the land-grant colleges to reach rural homes and parents, and at about the same time training for home responsibilities became available to children in the schools.

The opportunities which education offers to adults are based upon a new belief in the capacity of the adult to continue to learn throughout his maturity. Education for parenthood assumes that the problems of children have their origin as much in the personality difficulties of parents as in their lack of knowledge about the nature of the child. Therefore parent education is as much concerned with the means of satisfactory emotional adjustment and the entire scheme of human values as it is with the contributions of the arts and sciences to the rearing of a family.

During the early years of the movement, little was known in scientific circles about the needs of children and even less was in a form which parents could use. With the beginning of the twentieth century the social and biological sciences began a period of rapid development which has had a profound effect upon the parent education movement. Research in child development, in education, psychology and sociology, and the findings of psychiatry have led to a new understanding of children and of family life. Out of this have grown new techniques for the guidance of development and of human relationships.

While the pre-school laboratories, nursery schools, and clinics have been analyzing the problems of parents and the needs of children, various educational organizations and institutions have been active in developing facilities for making this information available to parents through the organization of parent study groups, conferences of parents and parent educators, lectures, radio talks, and a vast amount of popular literature.

The projects were developed under many different types of institutions and agencies concerned with children and with family life. Several of these, namely, the Child Study Association of America, the National Congress of Parents and Teachers, and the American Association of University Women, were organized on a national scale and were primarily concerned with the education of parents. Other national programs were developed in connection

with the American Home Economics Association, the Federal Office of Extension Work in Agriculture and Home Economics, the Federal Office of Education and the Federal Board for Vocational Education.

A number of state-wide programs have been inaugurated throughout the country in connection with various institutions. Conspicuous among these are the following: State Universities of Iowa, California, Minnesota, and Ohio; Extension Services of the State Colleges in New York, Iowa, Minnesota, Illinois, and Georgia; the State Departments of Education in New York, Oklahoma, California, and Ohio. In a number of cities, local programs have been developed by organizations and public schools to provide facilities for the education of parents. Through such services trained leadership in parent education has been available to develop study groups, train leaders, prepare material, coordinate state and local resources, and conduct research.

In view of the need for directing the development of such a rapidly growing movement, the National Council of Parent Education was organized for the purpose of coordinating activities and exercising leadership in the field.

It is obvious that a movement which has developed in such a wide variety of educational institutions and agencies would be in the hands of leaders who represent many types of training and experience. Most of the leaders, however, who are in charge of national, state, and university programs, have had extensive training in the fields of psychology, education, child development, medicine, home economics, and social work. Many of the national and state programs have enlisted volunteer leadership among parents. This group comprises what are called "lay leaders", who in some cases receive a limited amount of training and instructional material suitable for parent groups. Their chief function is to lead groups of parents in a discussion of their own problems and to put them in touch with sources of reliable material. They are also active in developing on the part of parents a consciousness of need for special training, and are active in making available to parents the educational resources which their localities provide. The training of parent educators is being undertaken in several universities where child development research centers have been established. This training provides intensive study in the field of child development and family relationships and supervised experience in teaching parents and children.

The content of parent education, in addition to these principles and practices culled from tested experience, is derived from many fields of knowledge, most conspicuous of which are sociology, psychology, and biology. Parent educators have been active in culling from these various sources the information and techniques which are of value to parents in understanding the development of children and the intricate problems of family life. In general the topics they most frequently discuss could be listed under the following heads: Heredity, problems arising in the social and educational development of the child, the child's health, special problems of behavior, home management, religious education, and vocational guidance.

The informal discussions which characterized the early parent study groups play a conspicuous part in the modern parent education movement. The tendency of parents to discuss their problems and to utilize their own experience in an effort to solve their problems is so persistent that even a formal lecture seldom closes without a discussion period. These groups make use of many devices in guiding their procedure. Study outlines based upon topics which the group has chosen or upon texts are frequently used. In some groups the members report on certain topical assignments. In others case studies are used as the basis of discussion. The directed observation of children both in homes and in nursery schools is used frequently to help parents to make an objective study of children and to demonstrate certain principles of management.

In addition to study groups in which the informal lecture and the discussion are the chief techniques used, there have been recently a large number of lectures and round tables on special topics given in connection with schools for parents, parent institutes, and conferences. The radio is being used increasingly as a means of reaching parents who do not belong to study groups and of presenting a lecture to study groups of parents who gather at the scheduled hour.

Although most of the instruction of parents goes on in study groups, a very significant phase of parent education is carried on with individual parents. Child guidance clinics and consultation centers are appreciating the necessity of working with the parent as well as with the child in bringing about a satisfactory readjustment. In addition various agencies in related fields, churches, religious and lay educational organizations, juvenile courts, children's aid societies, community centers, health clinics, and such

home visiting agents as the visiting nurse, the family social worker, and the visiting teacher are educating parents informally as part of their work of education, prevention, adjustment, and rehabilitation.

SUMMARY AND RECOMMENDATIONS

The fact that the family has survived to the present time is an indication that it fulfills deep-seated needs of the human race. The question is, should the family be merely the product of a changing environment, adapting itself to it, or are there fundamental human values in family life which should be conserved and the environment adjusted to them?

1. It is probable that the fundamental human values in family life are the product of the interaction of personalities within the family. There is need for the development of a technique for the measurement of personality factors within the family.
2. In the absence of the guidance which would be provided by such means of evaluation the family must depend upon knowledge of the principles of human behavior as they have been interpreted in the fields of psychology, psychiatry and mental hygiene.
3. Whether personal relationships within the family can continue to be effective in a different home environment than that provided by the family heretofore, and whether present cultural trends are actually threatening the essential nature of the family, are important subjects for further research. It is submitted that the federal census could give valuable aid in such studies by recording, tabulating, and analyzing data pertinent to family status in relation to geographic distribution, density of population, nativity, race, and relevant information.
4. Fundamental to the very existence of the family is its ability to provide an adequate income, and to expend it wisely. A basic income should be within the attainment of every family to insure the minimum standards for survival and security. This is an economic problem of national scope. A nation that values its future development will take steps to see that this basic income at least is available to all its people.

An equipment for parents to enable them to provide a background hospitable to the proper growth and development of the child implies a deviation of educational ideals and practice throughout the educational system from exclusively informative and utilitarian instruction toward the development of an appreciation of values in human life.

5. Home economics education should play a significant rôle in furthering ideals of family living through furnishing information to direct family consumption, and furnishing knowledge and skills for the management of the remaining household activities; and it has a special challenge to develop the individual to see these activities not as ends in themselves but in relation to the promotion of wholesome family life.

Furthermore, as various agencies take over certain functions of the family, they must also assume the responsibility of transmitting social values and culture. In direct response to the need of parents for help in the transmission of such content of living, the parent education movement has had its inception.

6. This committee firmly believes that instruction should be provided by schools and colleges to further the satisfactions of intelligent participation in family life and to prepare for courtship, marriage, and parenthood. However, as long as the family exists as a unit, the initial impetus toward adjustment or maladjustment will be provided in the home life of the child.

B. COMMITTEE ON THE INFANT AND PRE-SCHOOL CHILD

WITHIN the United States in the year 1930 there are 16,000,000 children under the age of six. These children constitute almost 13½ per cent of the entire population of the country and are the children who in a short time will be found in our schools, and a little later as adults will take their place as citizens. In previous periods of our history and in earlier civilizations little attention was paid the young child, either from the point of view of health care or from that of education and training.

With advancing knowledge, with the discovery that by concentrating our health and educational efforts between the ages of 6 and 20 we can not make an adequate approach to the problems of health, and of training, the young child looms larger and larger in our considerations. In recent years there has been great interest in the young child, partly because of the increasing realization of the tremendous importance of the early years for physical disease and health, and partly because of a greater realization of the significance of the period for later mental adjustment and health. Some authorities in both the health and the training field, describe the period of early childhood in the light of these considerations as the most important of all. The group of children within this age range, despite their number, which is as great as that of children in the grammar school, receive relatively little attention from society as a whole. For instance, the public expenditures for the welfare of children within this age range are slight, almost insignificant in proportion to the amounts expended on older children. Even the kindergarten literally has had to fight its way. At the present time only 27 per cent of the children in the United States between the ages of five and six are in kindergartens.

Further facilities for young children, established by private funds apart from those within the home, are slight. For instance few hotels, apartment houses, railroads, stores, or other commercial organizations make any special provision for the young children of their clients. It may be remarked in passing, however, that increased interest in the provision of such facilities is being shown.

Nor is there any widespread recognition on the part of either public or private agencies of the difficulties which face the parents of young children who, mindful of their responsibilities, seek assistance. But little of our formal education, whether in school or college, pays any attention to the fact that pupils and students will sometime be parents and have the responsibility for the care and guidance of young children. Young children, because they are inarticulate, have made no demands upon society; their parents, under an unfortunate tradition that the care of young children is simple, automatic, and unimportant have likewise been inarticulate.

While it is true that there has been great interest in young children in recent years on the part of physicians, educators, and scientists, nevertheless a survey at this age level presents complications and difficulties which do not exist in the more highly organized and definitely institutionalized phases of child health and protection, as found in work with older children. For the pre-school period is not one in which the child receives formal instruction in health; is not a period in which education is divided into disciplines; and is not a period in which it is possible even for practical purposes sharply to differentiate between different lines of approach. Rather is it a period in which the child learns by example and observation, a period in which material is absorbed informally, in which the child makes his first ventures into living under the close guidance of his parents.

But despite the informal and non-institutionalized character of the education to which the child is exposed, it is nevertheless true that the pre-school period is of tremendous importance for the establishment of those basic habits of health and behavior which will play such a large part in the child's subsequent adjustment to life. What he absorbs becomes the base upon which all subsequent education and training will be built. To look upon the child of this period as merely an organism that eats and sleeps and plays is to blind one's self to the results of the large number of excellent studies of young children made in recent years. Although many individuals may overcome the handicaps of a poor beginning, the fact remains that for most of us a good beginning is half the battle, whether we consider physical health or mental adjustment.

The problems which faced the committee were complicated by the fact that young children are not to be found in any consid-

erable number in institutions, in schools, or in organizations. As soon as the child is six or thereabouts, he enters school and from then on is accessible in large numbers in institutions established for his care. But the young child is to be found overwhelmingly in homes, and because he is found in the homes is relatively inaccessible. His education and training devolve, not upon individuals who are responsible to established agencies in society, but directly upon his parents.

In its deliberations, the committee was very conscious of this aspect of the life of the young child and reached the conclusion that if it surveyed health education and training for young children as reflected in the institutions in which such children are found, it would be dealing with such a small proportion of the total number of children in the country that it could not obtain a representative picture of the problems involved in a program of health education and training for young children.

It therefore undertook a survey of the child in the home as one of its main projects. Through the cooperation of workers all over the United States this study was carried out by means of interviews with parents on the lives of their children. The information which was obtained on various phases of the life of the young child in the American home, is presented briefly in this report.

But in spite of the fact that the institutions for the care of young children reach only an insignificant portion of the children in the population, nevertheless, it was felt that these institutions through their experience with numbers of children could furnish valuable information on the education and training of the young child. Particularly in recent years has there been great activity in this field as reflected in the searching inquiries into the possibilities of the education and training of young children and the development of new institutions for their care and training. Later in this report the result of a survey of such institutions is presented.

SURVEY OF INSTITUTIONS FOR THE EDUCATION AND TRAINING OF YOUNG CHILDREN

Limitation of Field

In setting up a study of the institutions for the education and training of young children it was necessary for the committee to define the institutions covered with some care, particularly as certain aspects of their functioning fall under other committees of the Conference. Among the institutions which have young children under their jurisdiction, day nurseries, nursery schools, kindergartens, orphan asylums, and boarding homes may be mentioned. It seemed to the committee that its inquiries should deal primarily with day nurseries, nursery schools, and kindergartens since these are the institutions most likely to have an educational policy. Boarding homes, being temporary places of sojourn, are rather ephemeral, are difficult to locate, and rarely have a program different from that found in ordinary homes. Since orphan asylums cover a wide range of ages, and vary much in their programs, they were not covered except insofar as definitely organized nursery schools or kindergartens constituted a part of their programs. In conference with the committee dealing with the education and training of the school child, it was agreed that our committee should cover all the kindergartens on which it could secure available data, except those which are part of the public school systems, and that the sub-committee on health problems in the kindergarten of Committee III C should cover the public school kindergarten. Programs for health education in public school kindergartens are a phase of the wider program of health education for the whole school. The kindergartens in day nurseries, nurseries, and private schools are independent of an organization with a general health program and so fall to our committee.

Types and Purposes of Institutions

As a result of its inquiries the committee has worked out the following classification which is used throughout all the tables and the following discussions.

CLASSIFICATION OF INSTITUTIONS

I. Day Nurseries

A. Purpose—relief of unsatisfactory economic or unwholesome social conditions in the home

B. Age range wide, i.e., may or may not have infants, usually have both pre-school and school children
C. Grouping of children—children of all ages are either kept together or divided into distinct groups on the basis of age

II. Relief nursery school, with or without kindergarten
A. Purpose—relief of unsatisfactory or unwholesome social conditions in the home and the education and training of children
(Intermediate type having characteristics of both the day nursery and nursery school. Usually sets up an educational program based upon fairly continuous attendance of the same children over a period of time)
B. Age range restricted—most frequently between 2 and 5, or 2 and 6 years
C. Grouping—in the relief nursery school one group; in the relief nursery school and kindergarten two groups

III. Nursery School
A. Purpose—education and training of young children
B. Age range narrow—usually between 2 and 5 years
C. Grouping of children—varies usually by age

IV. Nursery School in combination with a Kindergarten or with a Kindergarten and Primary School
A. Purpose—education and training of young children
B. Age range rather restricted, usually from 2 years to school age
C. Grouping—children are divided into two main groups—the lower ages in the nursery school, the upper in the kindergarten

V. Independent Kindergarten or Kindergarten in Conjunction with a Primary School (not connected with public schools)
A. Primary purpose—education and training of young children
B. Age range—narrow usually from 4 years to school age
C. Grouping—usually one group

As a result of its inquiries the committee has data available on 1275 institutions in which a total of 49,358 children were enrolled on March 1, 1929. Of these institutions 39 could not be classified on the foregoing basis and so were omitted. Since complete data with reference to every phase of the inquiry were not obtained from each institution, the numbers on which the tables which follow in the text were based vary. Usually the omissions are insignificant. In the tables, however, the number of cases on

which the table is based is given in the first column, and, in order to conserve space and enable ready cross-comparison, percentages rather than absolute figures are used. In the final report both will be included.

Number of Institutions and Age Range of Children

In Table I is presented a summary of the number of institutions in each classification, the number reporting, the number of children, the total number of children reported and the average number of children per institution.

TABLE I

Number of Institutions and Number of Children

Institutions		Number of Institutions Report Number of Children	Number of Children	Number of Children per Institution
Type	Number of Institutions Studied			
Day Nurseries	516	469	27,147	57.4
Relief Nursery School	60	58	1,789	30.8
Nursery Schools	169	159	3,101	19.5
Nursery School w. Kindergarten	114	111	4,441	31.0
Kindergartens	377	362	12,443	34.4
Total	1236	1159	48,921	41.9

Since some of the institutions represented have primary departments or continue on beyond the kindergarten level, this table is based only on children below the primary level. The last column is of particular interest. In the day nursery the average number of children is large, 57 per institution. In the relief nursery school which is intermediate between the day nursery and the nursery school the average number of children is 30.8 per institution, and in the nursery school 19.5 per institution. Where a nursery school and kindergarten are together, the average figure is 31 and for the independent kindergarten 34. In general, institutions of the relief type care for a larger number of children than does the institution set up for educational purposes.

Table II gives the relation of the ages of the children studied to the type of institutions.

TABLE II

NUMBER OF CHILDREN BY TYPE OF INSTITUTION AND AGE

Institutions		Total Children	Under 1 Yr.	1–2	2–3	3–4	4–5	5–6	6–7	7–8	Over 8
Type	Number										
Day Nurseries....	469	25,675	3.0	7.0	11.0	13.5	16.3	14.0	10.4	8.6	16.2
Relief Nursery School.....	58	1,795		2.9	17.2	30.9	31.3	17.1	0.4		
Nursery Schools..	159	3,095	0.1	1.8	22.4	38.0	31.4	5.9	0.2		
Nursery Schools w. Kindergarten	111	4,492	0.2	2.7	8.1	17.2	27.3	22.1	10.8	6.5	5.1
Kindergartens....	362	11,136	.....	...	0.1	7.2	33.8	38.8	10.8	3.8	5.5
Total.....	1159	46,193	1.7	4.4	9.1	14.7	23.2	20.4	9.4	6.3	10.8

It is clear that although the day nursery covers a very wide age range, the bulk of its population is to be found between 2 and 6 years. The relief nursery school covers a similar age range with, however, a larger majority of the children between 3 and 5 years. In the nursery school practically no children are found below the age of 2 years and very few children above the age of 5 years. Where the nursery school is combined with the kindergarten the two institutions together cover a wider age range. Usually such an organization does not take in children quite so early as does an independent nursery school. Predominantly the children are found between the ages of 3 and 6 years with a fair representation from 6 to 7 years. In the kindergarten on the other hand practically no children are found below the age of 4 years and most of the children are concentrated between 4 and 6 years. A few children above the age of 6 are found in kindergartens. In our data this is due partly to the fact that in some sections of the country the school age is 7 instead of 6, partly to a small number of retarded children, and partly to the fact that age of entrance does not coincide with the birthday.

Relation to Size of Community and Geographical Location

In Table III a distribution of the type of institution in relation to the size of the community is presented. For purposes of com-

TABLE III

Distribution of Institutions by Size of City

Institutions		Under 2,500	2,500–10,000	10,000–100,000	100,000–500,000	500,000–1,000,000	Over 1,000,000
Type	Number						
Day Nurseries	516	0.4	3.3	28.9	30.6	6.2	30.6
Relief Nursery School	60	0.0	6.7	8.3	25.0	13.0	46.7
Nursery Schools	169	7.7	20.1	26.0	18.9	11.8	15.4
Nursery School w. Kindergarten	114	10.5	15.8	22.0	29.8	7.9	14.0
Kindergartens	377	11.1	19.6	25.5	30.0	5.8	8.0
Total	1236	5.6	11.9	25.8	28.5	7.4	20.9
Per cent population in various sizes of community to total population		48.6	9.0	16.4	10.5	5.9	9.6

parison, the percentage of the total population of the United States in the various sizes of community is presented at the bottom of the table. Day nurseries and relief nursery schools are seldom found in rural communities and cities up to a population of 10,000. In communities above that size they are equally frequent regardless of size of community. Nursery schools are relatively infrequent in rural communities, are found in greatest frequency in communities from 2,500 to 500,000, and fall off in relative frequency in the great centers of population. Kindergartens show almost the same relative distribution as do nursery schools. Since kindergartens are more apt to be a part of the public school plan in very large centers, there is a great falling off in the relative frequency of independent or private kindergartens. If we compare the total figures we see that the institutions covered by this

report exist in rural communities only about one tenth as frequently as should be expected; in communities between 2,500 and 10,000 about as frequently as is to be expected; in communities between 10,000 and 100,000 about one and a half times as frequently; in communities from 100,000 to 500,000 almost three times as frequently; in communities between 500,000 and 1,000,000, one and a half times as frequently; and in communities above 1,000,000 slightly over twice as frequently as is to be expected on the basis of the population.

Study of the distribution of these various types of institutions in relationship to geographic divisions of the country using the United States census categories reveals no very significant tendencies. In general, day nurseries are more frequent than is to be expected in the Middle Atlantic region, and are less frequent in the South Atlantic and South Central areas. Institutions of the nursery school type are more frequent than is to be expected in New England and the Pacific coast, less frequent in the southern and Rocky Mountain regions. Private kindergartens are more frequent in New England and on the Pacific coast, and less frequent in the western and southern areas than is to be expected on the basis of population.

Length of Session

In Table IV there is shown the relation of the type of institution to the length of the sessions. In day nurseries a full day

TABLE IV

Distribution by Length of Session

Institutions		Full Day	Half Day
Type	Number		
Day Nurseries	516	100	0
Relief Nursery Schools	60	67	33
Nursery Schools	169	35	65
Nursery Schools with Kindergartens	114	38	62
Kindergartens	377	12	88
Total	1236	57	43

session is invariable. In the institutions of the relief nursery school type two thirds have a full day session and one third a half day session. In the nursery school whether independent or combined with a kindergarten it is found that only one third have a full day session and two thirds have a half day session, whereas with kindergartens only one out of every nine has a full day session. In general the relief agencies for young children use a full day session while the educational institutions use a half day session.

Auspices and Support

The relationship of the types of institutions to auspices is shown in Table V. In general, the chief auspices of the day nurseries

TABLE V

Institutions by Auspices

Institutions		Social Agency	Private Individuals	Church	Industrial Organizations	Public Auspices	College or University	Private Schools	Miscellaneous
Type	Number								
Day Nurseries..	516	30.4	39.5	20.5	2.5	5.4	0.2		1.4
Relief Nursery School.....	60	41.6	28.3	20.0	1.7		8.3		
Nursery Schools	169	11.2	49.1	5.9		2.9	30.2		0.6
Nursery School with Kindergarten.....	114	4.4	26.3	3.5	0.8	1.8	7.9	53.5	1.6
Kindergarten...	377	13.5	35.4	13.8	2.4	2.1	7.5	24.7	0.9
Total.....	1236	257.0	467.0	184.0	24.0	43.0	94.0	154.0	13.0
Per Cent.....		20.8	37.9	14.9	1.9	3.4	7.6	12.4	1.1

and relief nursery schools are either social agencies, private individuals, or churches, whereas, the chief auspices under which nursery schools appear are either private individuals or colleges and universities. Kindergartens are sponsored in the main by private individuals or by private schools and in a lesser degree by social agencies and churches. Public school kindergartens were not included in this survey. Private individuals as used in this table refer both to private individuals as such and to organizations of private individuals not directly connected with a social agency, church, or other public institution.

A detailed analysis was made of the sources of support for the various classes of institutions. It shows in the main that most frequent sources of support for the day nursery and institutions of the relief nursery school type are to be found in community funds, private funds, subscription, tuition, and funds from religious organizations. In the case of the nursery school and the nursery school combined with the kindergarten the most frequent sources of support are either private funds, tuition, or university funds. In the case of the kindergartens here studied the chief sources of support are either private funds or tuition.

Buildings and Space

A detailed study of the purposes for which the buildings in which these institutions are located were used and the number of rooms used by each institution was made. The material is too detailed for presentation here. It may be said however, that in 69 per cent of the day nurseries, 85.2 per cent of the nursery schools, 95 per cent of the relief nursery schools, 84.2 per cent of the nursery schools combined with kindergarten, and 91.8 per cent of the kindergartens, some function other than the education and training of young children is carried on in the building. This indicates that, by and large regardless of type, the institution is usually located in a building in which other functions are carried on. The number of the other functions carried on in the building, which varies greatly from institution to institution, is of some importance in considering the protection of the child.

With reference to the number of rooms available for the institutions only a few generalizations can be made. Day nurseries cover a wide range of sizes with a modal point at five rooms. The relief nurseries have a modal point at two rooms, nursery schools at three, nursery schools with kindergartens at two rooms, and the kindergarten a modal point at one room. In general, if we consider the relation of space to the number of children we find that in nursery schools the space available is greater for each individual child than is the case in any of the other type of institution. Maintenance of an adequate educational training program for young children, involves a considerable amount of space, much more in proportion per child than is required for older children and probably more than is available in institutions of the relief type.

Fire Protection

A considerable amount of material has been accumulated with reference to the handling of the fire protection problem in institutions of the kind covered by this report. With regard to buildings we find that of the institutions caring for fewer than 75 children, from 30 to 40 per cent of the buildings are of frame construction. The remainder are equally divided between semi-fire proof or fire proof construction. Where over 75 children are handled, few—less than 10 per cent—frame buildings are found, and in the remainder from one fourth to one third are semi-fire proof and from two thirds to three fourths fire proof. Material on the relationship of fire extinguishers and exits to the number of children will be presented in the final report. Our general impression is that the number of exits in many institutions is inadequate considering the youth of the children and the difficulty of handling them as a group in an emergency. In most institutions, fire extinguishers of the chemical type are to be found on each floor.

There is a rather wide variation in the practice with reference to fire alarms. Day nurseries, relief nursery schools, and kindergartens have fire alarms located in the buildings in from 20 to 50 per cent of the cases, whereas in the nursery schools and nursery schools combined with kindergartens two thirds have fire alarms. Equipment of this type is more likely to be found in the larger institutions than in the smaller institutions. Practice with reference to fire drills varies widely. Forty-five per cent of the day nurseries, 80 per cent of the nursery schools and 60 per cent of the nursery schools and kindergartens combined and 50 per cent of the kindergartens never have fire drills. Of those institutions which have fire drills very few have them as frequently as once a week. Many of the responses are indefinite as to the frequency of the drills. This points to a very important problem in the administration of these institutions, as there is relatively little evidence from our material that anything more than formal installation of extinguishers or provision of fire escapes is done to meet the fire problem. It may be said in justice to institutions at this level, that there is some difference of opinion as to whether fire drills are not more disorganizing to the responses of the children than is their absence. On the whole, what seems to be needed is a more careful consideration of the whole problem of fire pro-

tection and the thorough training of the staffs with respect to their specific duties in case of fire.

Physical Equipment

The replies to our inquiries on the heating, ventilating, and illumination of the institutions show that practically all have heating systems which seem satisfactory to their staffs; that in 40 per cent of the institutions of all types, heat is controlled thermostatically; and that in 25 per cent of them there is automatic control of humidity. The ventilating system is satisfactory in 80 per cent of the institutions, and there is electric illumination in practically every one.

The study of the sanitary equipment of the institutions is much too detailed for presentation in a preliminary report. In general, toilets are of the adult size, rather than of the smaller size now available on the market. There is quite a difference in practice in placing the seats, either in separate compartments or not. In the day nurseries and nursery schools 40 per cent use separate compartments, whereas in the kindergartens 75 per cent do. The wash bowls are usually placed at a height which enables young children to use them without climbing, the modal heights being between 22 and 25 inches. Bathtubs are found in 75 per cent of the day nurseries and relief nursery schools, in 40 per cent of the nursery schools, and in 23 per cent of the kindergartens. Drinking fountains are found in three fourths of the day nurseries, in most of the kindergartens, but in only one third of the nursery schools. Separate lockers for children's wraps are found in two fifths of the day nurseries, in three fifths of the nursery schools, and in one third of the kindergartens. Although floors in bathrooms and toilets are usually of wood, more frequently than not they are covered with linoleum; 30 per cent have either tile or concrete floors. Bathroom and toilet floors are usually washed daily or three times each week, rarely as infrequently as once a week. The floors of the rooms in which instruction is given or the children play, are usually of wood, more often than not covered with linoleum, and are washed either daily or two or three times a week in three fourths of the day nurseries, in about half of the nursery schools, and in one fourth of the kindergartens. In almost all institutions for young children of whatever type floors are swept daily or twice a day. In but few of the day nurseries

or nursery schools are sweeping compounds used. It was the impression of our technical assistant who visited a number of institutions unannounced that the standards of cleanliness were unusually high.

Provision of sleeping equipment varies considerably, depending on whether the institution assumes the full day or only the half day care of the children. In general, day nurseries use beds and cribs, while nursery schools use cots. Kindergartens and half day nursery schools in which children take short rests, usually have mats which can be placed on the floor. Almost without exception, a bed, crib, cot, or mat is provided for each child.

Playgrounds

Outside play facilities are found in practically every institution. In 85 per cent of the day nurseries, 96 per cent of the nursery schools, and 90 per cent of the kindergartens, this is in the form of a yard or playground. The remainder have either roof playgrounds, porches, or use an adjacent park. It is the impression of our technical assistant, on the basis of his visit that almost all the playgrounds are inadequate in size, particularly those of the day nurseries. He also feels that where children of a range of ages utilized the same playground, some provision should be made to separate the younger children from the older to prevent the almost complete monopoly of facilities and space by the four and five year olds. Practically all the playgrounds are enclosed. The lack of apparatus is particularly noticeable in the day nurseries. Nursery schools in general have more apparatus and larger playgrounds. More ingenuity is shown in the nursery schools in the construction of inexpensive apparatus for use on the playgrounds.

Personnel

A study of the personnel of the institutions for young children is of considerable importance, both from the standpoint of considering the present accomplishment in the field and for considering future improvements in the technique of health education within the institutions. There has long been a tradition that the care of a young child can be turned over to anyone, regardless of intellectual or educational level.

Our inquiry was concerned first with the academic training of the staff. By staff here we refer not to the specialists of various

types who may be available to the institution, but to the teachers, directors, matrons, and so on, who are directly responsible for the education and training of the children. Maids and service workers were carefully excluded from consideration. In Table VI the data are presented.

TABLE VI

TRAINING OF TEACHING PERSONNEL

Institutions, Type	Grammar School	High School	Special Training Beyond High School	College Graduate	Omit
Day Nurseries	12.5	14.3	25.3	5.5	42.6
Relief Nursery School			79.4	13.9	6.9
Nursery Schools	1.2	1.2	35.5	51.9	10.2
Nursery School with Kindergarten	1.2		41.7	28.6	28.6
Kindergartens	2.1	2.7	52.1	22.4	20.7
Total					

It is clear that the typical person found in the day nursery has had some special training beyond the high school level, but has in only rare cases (1 out of 20) a college education. The large percentage of 'Omits' (42.6) here is of some significance since it probably means awareness of a rather low educational level, and an unwillingness to indicate it. The data on the institutions of the relief nursery school type show higher educational attainment than the day nursery. In the nursery school we find over 50 per cent college graduates and 35.5 per cent exclusive of the college graduates with special training beyond the high school level. With the kindergarten and the combined nursery school and kindergarten the proportion of college graduates drops to roughly one quarter, and the special training beyond high school moves up to one half. Here also the 20 per cent proportion of omissions is high. Many kindergarten teachers are graduates of two-year teachers' colleges.

Our next inquiry concerned itself with the hours per week put in by those in contact with the children. The average number of hours per week was for the day nursery 50.8; for the relief nursery school 29.9; for the nursery school 26.4; for the nursery school

combined with the kindergarten 23.4; and for the kindergarten 20.1. The institutions interested in education and training rather than relief move in the direction of a rather generous schedule as far as time is concerned. The most striking figure here is that of the day nursery. One wonders how a person who spends so many hours a week in close contact with young children can develop a very healthy program for the children or herself.

We have also calculated the average number of children per teacher for each of these types of institutions. A distinction was made between those institutions in which there is a single person who both administered the institution and carried on the training function, and those in which there were two or more persons on the staff. Maids, cooks and other service help, specialists, student teachers, and volunteer workers were excluded. The results are presented in Table VII. In one person institutions, there are

TABLE VII

AVERAGE NUMBER OF CHILDREN PER TEACHER

Institutions		One person Institutions	Staff of Two or More
Type	Number		
Day Nurseries	469	47.6	21.1
Relief Nursery School	58	21.9	11.9
Nursery Schools	163	15.1	7.4
Nursery School with Kindergarten	109	23.1	10.7
Kindergartens	350	24.1	13.7
Total	1149		

almost twice as many children per teacher as in those with larger staffs. The day nursery has the heaviest teacher load and the nursery school the lightest. When one considers the average number of hours per week as well as the load of children devolving upon the worker in the day nursery, in addition to feeling some sympathy for the overburdened workers, one wonders whether an adequate health or training program can be developed.

MEDICAL FACILITIES

A study of the medical facilities available in these institutions shows only a very small proportion having physicians directly on

their staffs. The figures are: for the day nursery group 3 per cent; for the nursery school 13 per cent; and for the kindergarten 7 per cent. Very few of these are pediatricians. Practically no institutions have dentists available. On the other hand two thirds of the day nurseries and relief institutions are in cooperation with hospitals and clinics and secure some medical service in that way, while 30 per cent of the nursery schools have hospital or clinic connections.

A considerable number of the institutions has some form of daily inspection of the children with provision for sending them one expert or securing expert help when necessary. Fifty-six per cent of the day nurseries, 60 per cent of the relief nursery schools, 79 per cent of the nursery schools, 39 per cent of nursery schools with kindergartens, and 18 per cent of the kindergartens have such facilities as part of their daily program. Among the day nurseries, an additional 23 per cent lacking daily inspection have provision for inspection once a week by nurse or physician. In the day nurseries, daily inspection is made by a physician in 2 per cent, a nurse in 73 per cent, and by teachers or matrons in 25 per cent of the institutions; in the nursery school by physicians in 18 per cent, by nurses in 45 per cent, and by teachers in 37 per cent; in the kindergarten by physicians in 19 per cent, by nurses in 36 per cent, and by teachers in 45 per cent of the institutions.

When we examine the types of records which are kept we find that only in 15 to 25 per cent of the institutions of the various types are permanent records on prepared forms of medical examinations kept, that 21 per cent of the institutions keep medical histories, and that practically none keeps dental records. More detailed data on other phases of the medical aspects of caring for young children in groups will be presented in detail in the final report. Suffice to say at this time that the committee feels very strongly that those who undertake to bring young children together in groups for education and training purposes have a great responsibility in protecting the children from contagion, as well as in the supervision of their health in other respects. Our technical assistant as a result of his visits to institutions of all types feels that the problem of efficient health supervision is still largely unsolved.

A study of the nutritional service and staff in the institutions shows that in the main an administrator prepares the menus, or

that a dietary from outside is utilized. From 5 per cent to 10 per cent of the institutions within the various classes have trained nutritionists on their staffs.

None of the day nurseries has psychologists or psychiatrists on its staff. Nineteen per cent of the nursery schools have psychologists, and two and one half per cent have psychiatrists. Of the kindergartens one half of one per cent have psychologists and none has psychiatrists. On the other hand 10 per cent of the day nurseries, 8.9 per cent of the nursery schools, and 15 per cent of the combined nursery schools and kindergartens cooperate with behavior clinics. Half of the institutions irrespective of type make use of mental tests. Detailed records of behavior, personality ratings, and records of progress in adjustment are kept in only a few institutions, usually of the nursery school type.

Educational Program

The Committee has accumulated a considerable amount of information dealing with the educational program of the five types of institutions, which will be presented in detail in the final report. Here only a brief summary can be given.

One of the first questions raised concerned the amount of play apparatus and play material available for the children, since it was felt that the amount and variety of such material was an indication of the functioning of the institution, as modern theory stresses the importance of such equipment. On the basis of the existing literature, a list was made, first of the various kinds of permanent play apparatus and second of the smaller play materials. The institutions were requested to check this list. Comparison was made between nursery schools and day nurseries, after dividing both types of institutions into large and small so that mere size would not determine the amount of material available. The average number of items checked by the two classes of institutions is as follows:

	Larger Institutions	Smaller Institutions
Play Apparatus		
Day Nursery	7.5	3.9
Nursery Schools	11.0	4.7
Play Materials		
Day Nursery	27.6	12.9
Nursery Schools	32.2	16.7

It is evident that, in general, nursery schools have a wider range of equipment than do day nurseries, irrespective of size. Inspection of the distributions shows that there is also much more constancy in equipment from nursery school to nursery school than from day nursery to day nursery. In both groups, there are institutions whose provision of play material is so slight as to make one wonder what the children do while they are present at the nursery or nursery school.

A second analysis is presented in Table VIII, which is based on a list of typical activities which was sent to all institutions with a request that they check those which were part of their program. Serving food and providing for naps were included, not

TABLE VIII

ACTIVITIES IN PROGRAM

Institutions		Serving Food	Provision for Naps	Facilities for Outside Play	Training in Routine Habits	Social Attitudes	Language Period	Music and Rhythms	Trips Outside Nursery	Modification of Home Activities
Type	Number									
Day Nurseries..	516	95.2	97.3	93.8	94.2	67.2	64.9	62.0	63.6	61.8
Relief Nursery School.....	60	83.3	81.6	93.3	93.3	91.6	90.0	95.0	81.6	76.6
Nursery Schools	169	73.1	45.1	94.3	91.3	93.7	89.5	95.4	62.2	78.2
Nursery School w. Kindergarten.....	114	77.2	47.4	94.7	90.4	94.7	94.7	97.4	76.3	83.3
Kindergartens..	377	44.8	26.3	74.3	71.6	83.8	88.6	93.1	68.2	59.7
Total.....	1236									

to check on facilities, but because of the fact that some authorities feel that training in eating and sleeping should be a part of the educational program with young children. While the categories given were broad, and could not be defined adequately, nevertheless some interesting results appear. That the activities are typical of the general program is indicated by the large percentage of institutions of every type that record their presence in the program. The day nursery emphasizes sleeping, eating, outside play, and training in routine habits, but does not emphasize training in social attitudes, a language period, music and rhythms, trips outside the nursery, and cooperation with the home in modifying the child's activities within the home, as much as do other types of

institutions. The relief nursery school gives approximately equal emphasis to all the activities listed. Nursery schools stress outside play, training in routine habits, social attitudes, and the language and music periods, but give less attention to trips outside the nursery and to modification of home activities. The nursery school combined with a kindergarten parallels the nursery school in these respects. In the kindergarten less emphasis is put on outside play, and training in routine habits, and more emphasis is placed upon training in social attitudes, language, music and rhythms.

Health Education

The approach to the problem of specific material on health education was twofold. On one of our inquiries we asked whether any attempt was made to give the children reasons for their health activities, and to distinguish between those in a presented list in which the instruction was incidentally given and those in which it was part of the regular program of instruction. It is somewhat difficult to interpret the results. One can not be sure just what incidental instruction means; it may be one comment on the value of drinking milk per child per year, or it may be much more. Probably the data on the regularity of instruction are more significant.

The figures show that in about half the institutions regardless of type, the reasons for drinking milk are given incidentally, rather than as a part of the regular program, and that in the other half regular instruction is given. The exception is to be found in the nursery school in which only a fourth give regular instruction. The distributions for eating vegetables are practically identical with those for milk, except that a slightly larger proportion of institutions stress incidental instruction rather than regular. With brushing teeth, the same results are obtained except that the percentages for regular instruction are somewhat greater. The exception again is to be found in the nursery school in which the percentages are low. On the question of safety in crossing streets we find again the same division between incidental and regular instruction. In giving reasons for the treatment of cuts or burns, incidental rather than regular instruction predominates. With reference to the danger of passing things from one mouth to another the groups regardless of type split about evenly between incidental and regular instruction. When we come to personal

cleanliness we find a reversal for all types of institutions. Much more regular instruction is given, only about one third of the institutions, regardless of type, leave this to incidental instruction. The only conclusion which seems possible from these data is that opinion is rather sharply divided as to whether young children should be given any formal instruction about health. Certainly there is agreement on the point that a child should acquire basic health habits, but whether a rational, formal approach should be used remains a problem.

The second approach on health education arose out of the visits of our technical assistant to a group of institutions selected as typical. He visited institutions of all five types and paid particular attention to problems of health education because of the difficulty of getting concrete information through inquiry. He found three main approaches to health education as distinct from training in health habits. These are:

First: The use of the story or conversation period at intervals to interest the children in health activities and the reasons for them.

Second: The use of songs and rhymes about health practices.

Third: A direct explanation to the individual child of the reasons why certain things should be done and others not done, i.e., why one should cover his mouth and turn his head when about to sneeze.

One half of the day nurseries and one fourth of the nursery schools used none of these methods. Of the remainder the day nurseries tended to favor the songs and rhymes and the nursery school the use of the story or conversation period and direct explanation as occasion arose. In general the technician found much skepticism as to the value of formal health instruction with children below the age of six.

Summary

In this report material is presented on five different types of institutions which are concerned with the education and training of young children. Over 1200 institutions with an enrollment of approximately 50,000 children were studied. These institutions are seldom found in rural districts. Institutions of the relief type generally have a full day session while those which stress education are more likely to have a half day session. The chief sources of support for the relief institutions is to be found in community funds, private funds, subscriptions, tuition and funds from relig-

ious organizations, for the educational institutions in private funds, tuition and university or college funds.

Studies of the physical plant show high standards of cleanliness, fair sanitary provisions, rather inadequate outdoor playground space, and an important, but not solved, problem with reference to fire protection. The personnel in the relief type of institution is of lower academic attainment, and carries a heavier load than does the personnel of the educational institution. The medical supervision of young children in groups presents a serious problem which has only partially been met by a daily inspection of the children by nurse or teacher. Medical records are generally inadequate.

A study of the educational program shows a smaller variety of play and educational apparatus in institutions of the relief type. In general the relief institution is more apt to emphasize routine and basic habits, whereas the educational institution emphasizes training in social attitudes, language, and music and rhythm. No clean cut procedure with reference to health education is found. In general, there is a division of opinion whether such instruction should be given informally or set up as a regular part of the program. Throughout the field there is a realization of the importance of the early period for the establishment of basic health and adjustment of habits. Emphasis however is largely placed on the direct training in basic habits rather than upon health education as a distinct discipline. Many of the relief institutions, under the influence of the educational institutions which have lately come into the field of the young child, are developing an educational policy and are showing a healthy tendency toward a broader conception of the possibilities of work with young children.

SURVEY OF THE EDUCATION AND TRAINING OF THE YOUNG CHILD IN THE HOME

It has already been pointed out that this committee felt very strongly that a study should be made of the training and education of young children within the home. This of course is much easier said than done, since there are few facilities for the direct study of the home training program. After considerable discussion, the committee felt that the best procedure in the present state of our knowledge was to make a kind of census by asking a number of questions which would give a picture of the daily life of the child.

By establishing a basic picture, it might be possible to go on and build up a series of recommendations. In spite of the fact that there has been a great deal of discussion about the training and education of young children, very little concrete data are available as to what happens within the home, which is the only agency through which a health education program for the nation's young children can be developed.

Through the cooperation of a considerable group of persons who gave a preliminary series of interviews a number of blanks were developed. The first contained instructions for the interviewer, the second secured information about the interviewer herself, the third obtained data on the community in which the families visited lived, the fourth secured information regarding the families visited, the fifth covered the infant under 1 year, the sixth dealt with the child from 1 to 5 years inclusive, and the seventh obtained data on the older child, from 6 to 12 years.

Briefly the field worker, having already filled out the blank about the community, was instructed to visit a home in which there was a young child and interview the mother. On the basis of the interview with the mother she filled out the blank concerning the family and then filled out appropriate blanks for each child in the family. The questions asked are too numerous for presentation in a preliminary report. For instance, the general information blank contained 69 questions, the infant blank 50, the blank for the young child 129, and that for the older child 83.

Through the hearty and effective cooperation of agencies all over the United States it was possible to secure the filling out of these blanks. Due acknowledgment of the assistance will be given in the final report of this committee. Here we can only express to the highest degree our appreciation of the care, accurateness, and completeness with which the workers cooperated in securing the basic data.

Since it is obviously impossible within a short space to present the results for every age group, for every socio-economic group, for every size of community and geographical division, it seems best in this preliminary report to give two analyses of the data, one of which is based on the home inquiry and gives a concrete picture of the kind of home in which the young children live, and the other which is based on the data on four-year-old children, presented in some detail in order to show the kinds and amount

of material available with reference to the life of the child, but without the detailed analysis of all the interrelated factors and without consideration of other age groups. The four-year-old group is used because it is the largest group and because it comes well up in the age range. In the final report, analysis of all ages will be made under various categories to determine the interrelation of factors. The committee has available data on 2757 white families and 3520 white children, exclusive of infants under one year. Since the number of blanks on Negro families and children was small, they will not be considered here, but will be treated in the final report. We also have approximately 800 blanks on infants under one year which are in process of tabulation as this report is being written, and which are not included in the summaries.

In order to clarify the nature of the data which the committee has available, we present first the distribution of the children studied with reference to age.

TABLE IX

Age Distribution of Children Studied (Exclusive of Infants)

Age	Number
1 year to 1 year 11 months	365
2 years to 2 years 11 months	581
3 years to 3 years 11 months	650
4 years to 4 years 11 months	631
5 years to 5 years 11 months	426
6 years to 6 years 11 months	163
7 years to 7 years 11 months	169
8 years to 8 years 11 months	161
9 years to 9 years 11 months	136
10 years to 10 years 11 months	104
11 years to 11 years 11 months	96
12 years to 12 years 11 months	38
Total	3520

From this distribution it is clear we have good samples between one year and five years, and smaller samples from six years up. This is due to the fact that the committee's primary interest was in children under six years. Of the number studied, 1785 are boys and 1734 are girls, one blank having omitted sex.

The geographical location of our children as shown below indicates that they come from every region of the country.

TABLE X

GEOGRAPHICAL DISTRIBUTION OF CHILDREN STUDIED

New England	447
Middle Atlantic	481
East North Central	913
West North Central	379
South Atlantic	295
East South Central	283
West South Central	199
Mountain	145
Pacific	374
Omitted	4
	3520

Distribution by size of community shows every classification represented with samples of fair size.

TABLE XI

DISTRIBUTION OF CHILDREN BY SIZE OF COMMUNITY

Open country	843
Under 2,500	713
2,500–10,000	480
10,000–100,000	611
100,000–500,000	325
500,000–1,000,000	297
1,000,000 and over	256
Omitted	5
	3530

The following distribution by socio-economic status, based on the seven point classification developed by the Institute of Child Welfare of the University of Minnesota on the basis of the Barr and the Taussig classifications shows every class well represented.

TABLE XII

DISTRIBUTION OF CHILDREN BY SOCIO-ECONOMIC GROUP

Group I.	Professional	384
Group II.	Business, executive, and so on	361
Group III.	Highly skilled and upper clerical	848
Group IV.	Farmers	729
Group V.	Skilled workers, trades, and clerical workers	692
Group VI.	Semi skilled workers	249
Group VII.	Laborers, urban and rural	257
		3520

The committee does not wish to give the impression that it feels that this is an absolutely adequate sample of the children in the United States. But it does wish to emphasize the fact that as much care as was possible under the circumstances was taken in the selection of the sample, and to point out that no existing study approaches this one with reference to the number of children studied, to the extent of the information gathered, or even to the completeness of the sample.

This points the way to a more effective and complete analysis of the home life of the child in order that a better program in health education and training can be made available in the home for young children. In a sense the work of our committee overlaps that of Committee III A on Parental Education. We are however primarily interested in the analysis of the life of the child and hope that through our work a more adequate realization of the importance of the training of young children will come, together with concrete suggestions of what the training should include. The means through which this can be achieved will be found in a broadly conceived program of parental education.

The Families and Homes of Young Children

An analysis of the family blank in some detail, based on the entire 2757 family blanks available is presented in the following pages. For purposes of this preliminary report, the material will be presented very largely in the form of percentages in order to facilitate cross comparisons and to simplify treatment. In the final reports the actual figures as well as the percentages will be presented.

General Information on the Family

In 98.7 per cent of the families studied the mother was living, and in 98.6 per cent the father was living. In 1.6 per cent of the families, the parents were divorced and in 2.8 per cent the parents were separated. The median age of the mother at the time the inquiry was made was 32.9 years and of the father 37.3 years. The distribution of the ages of fathers and of the ages of mothers was as follows:

In interpreting these data on the age of mothers and fathers it should be remembered that one of the criteria of the basis on which

TABLE XIII

AGE OF FATHERS AND MOTHERS AT TIME OF INQUIRY

Ages	Fathers, Per Cent	Mothers, Per Cent	Ages	Fathers, Per Cent	Mothers, Per Cent
Under 20.....	0.1	0.9	35–39.....	36.5	22.6
20–24.....	2.9	9.1	40–44.....	17.3	10.9
25–29.....	15.5	23.4	45–49.....	8.6	2.5
30–34.....	24.9	29.8	50 up.....	4.3	0.8

the families were selected for this study was the presence within the family of a child under the age of five years.

The particular child whose presence caused the selection of the family for this study was living with his own parents in 93.3 per cent of the cases, with the mother only in 3.4 per cent, with the father only in 0.4 per cent, with the father and a stepmother in 0.2 per cent, with the mother and a stepfather in 0.6 per cent, with adopted parents in 1.0 per cent and with the grandparents in 0.9 per cent of the cases. Less than 7 per cent of the families covered by this study fall in the classification broken homes. This is no doubt due to the fact that our study is concerned with young children. The next query concerned the number of persons living in the home other than the immediate family. It was found that in 66.5 per cent of the homes there were no persons other than the immediate family residing. In 16.5 per cent there were relatives; in 9.1 per cent, servants; in 6 per cent, lodgers; and in 1.9 per cent, individuals who do not fall in any of these classifications. Two-thirds of the children live in homes in which no persons outside the immediate family live, one-third in homes in which the presence of other persons must be considered a factor.

EDUCATION, OCCUPATION AND HEALTH OF PARENTS

A summary of the education of the fathers and mothers is found in Table XIV:

Forty per cent of the fathers and 35 per cent of the mothers have less than a high school education and 74 per cent of the fathers and 72 per cent of the mothers have less than a college education. One of the general conclusions which may be drawn from these data is that any program which looks forward to modifying the education and training of the child within the home must be developed at a

TABLE XIV

LENGTH OF SCHOOLING OF FATHERS AND MOTHERS

	Fathers, Per Cent	Mothers, Per Cent
No formal schooling	0.7	0.5
4 years or less	5.3	5.0
8 years or less	40.4	34.5
10 years or less	53.6	47.6
12 years or less	73.7	71.7
14 years or less	80.9	85.9
16 years or less	92.1	97.5
18 years or less	95.9	99.6
21 years or less	99.9	100.0

level such that can be put into practice by individuals who have had a grammar or high school education.

Since the data on the occupation of the father were fitted to the socio-economic classification presented earlier, no other presentation is necessary than that already given in the description of the sample. The material on the occupation of the mother before marriage is too detailed for presentation here. The inquiry as to whether the mother is gainfully employed now or not brings out the fact that 11.5 per cent of the mothers are gainfully employed. Of the mothers gainfully employed, 27.9 per cent are employed within the home, 67.2 per cent outside the home and 5.3 per cent both in and out of the home.

Questions on the health of the parents show that 4.8 per cent of the fathers are reported as often sick, 12.2 per cent as occasionally sick, 45.7 per cent as seldom sick, and 37.3 per cent as never sick. Similar material on the mothers shows that 4.9 per cent are reported as often sick, 17.7 per cent as occasionally sick, 45.5 per cent as seldom sick, and 32.3 per cent as never sick. The agreement between these percentages is striking. They would suggest that some of our clinical data give an exaggerated impression of the amount of illness in a sample of the population not selected by reason of illness. It must be remembered also that the clientele of this study is in the age of maximum health.

BOOKS, TOYS AND PLAY EQUIPMENT

A considerable amount of material accumulated with reference to the neighborhood, the character of nearby buildings, the type

of houses in which the family lives, the conveniences in the home, and other similar phenomena is being deferred for the final report. But the study of the number of books in the home is of immediate interest. It shows that in 8.3 per cent there is none; in 28.4 per cent from 1 to 20 books; in 16.2 per cent from 26 to 50; in 18.5 per cent from 51 to 100; in 14.8 per cent from 101 to 250; in 8 per cent from 251 to 500; and in 4.8 per cent over 500. This indicates that over half of the American children grow up in homes in which there are fewer than 50 books and three-fourths grow up in homes in which there are fewer than 100.

On the basis of a study previously made by Skalet on play equipment in typical homes, toys were divided into nine classes. Our query required checking of the classes which were present in the home. In addition to a study made of each type of toy in homes of various levels, a study was made of the frequency of the classes of toys in the home, thus in one home only one of the nine types of toys might be found while in another eight of the nine classes might be present. A summary of the results is presented in the following table:

TABLE XV

Number of Classes of Toys within Homes

Classes	Per Cent	Classes	Per Cent
1	3.3	6	15.5
2	6.4	7	17.8
3	9.4	8	12.8
4	11.0	9	9.6
5	14.2		

On the whole a very good showing is made. There were no homes without toys. In only 3 per cent of the homes studied was there only one type of toy, and in the great majority of homes (70 per cent) there were five or more distinct types of toys. It should be remembered that this is not a measure of the quality of the toys, but merely of the variety.

Ninety-five per cent of the families had a yard which was used for play. An analysis of the size of the yard will be made in the final report. In a study of the apparatus available within the home yard, four categories were given, plus a space for recording any other apparatus. In 40 per cent of the yards there was a

swing; in 40 per cent a slide; in 4.1 per cent a teeter-totter; in 7.2 per cent a sand box; and in 39.7 per cent some other piece of apparatus. In only 10.4 per cent of the yards was no apparatus for the home play of children found. On the whole these are encouraging figures to the committee since they indicate that in all but one-tenth of the homes covered by this study there is some recognition of the need of play equipment in the form of a permanent piece of apparatus.

Our next query concerns the accessibility of the nearest playground. In 22.5 per cent of the cases, exclusive of the farm and rural groups, the playground was across the street or within a quarter of a mile; in 17.2 per cent within a quarter to a half mile; in 16.2 per cent from a half to three-quarters of a mile; and in 2.7 per cent from three-quarters to one mile away. In 23.9 per cent the playground was within one to four miles and in 13.1 per cent four miles or over. 4.4 per cent reported no accessible playground. Thus about three-fifths of the children are within one mile of a playground, one-fifth more within four miles of a playground, and one-fifth are so far away that the playground is inaccessible or have none available. The committee feels that more careful consideration might be given by communities to locating their playgrounds so as to be readily accessible.

Sources of Information on Child Care

The next section of our interview was concerned with the sources of information on child care available to the parent. Data on the number of books read within the last year are presented in a table which follows:

TABLE XVI

Books on Child Care Read within Year

Socio-Economic Status	Per Cent Reading No Books	Per Cent Reading 1–2 Books	Per Cent Reading 3–4 Books	Per Cent Reading 5 Books or More
I	25.0	32.2	16.9	33.8
II	34.7	24.0	16.4	35.0
III	47.8	23.5	14.1	14.6
IV	57.2	23.9	10.5	8.4
V	52.5	26.8	10.9	9.7
VI	70.3	21.0	6.1	2.5
VII	75.2	14.6	6.4	3.9
Entire group	50.5	23.4	12.2	13.8

Half the parents of young children do not read any books on child care and three-fourths do not read more than two books within a year. The reading of books on child care is definitely related to socio-economic status. Of those in the professional groups, one-fourth have not read a book within the year whereas within the laboring groups three-fourths have not. In the farmer or rural group 57 per cent have not read a book on the subject during the year.

When we analyzed the ownership of the books we find that of those reading books, 59 per cent owned them, 30 per cent obtained them from the library, and that 11 per cent both owned books and obtained them from the library.

A similar study was made of the reading of pamphlets on child care as shown in the following table.

TABLE XVII

PAMPHLETS ON CHILD CARE READ WITHIN YEAR

Socio-Economic Status	None Read, Per Cent	1–2 Read, Per Cent	3–4 Read, Per Cent	5 and Over Read, Per Cent
I	25.4	12.4	17.7	44.5
II	23.5	13.0	15.5	48.1
III	36.1	18.0	13.3	32.6
IV	30.1	23.1	18.8	28.0
V	39.2	19.6	15.6	25.7
VI	45.6	19.4	12.1	22.8
VII	53.4	19.9	7.2	19.5
Entire group	35.3	18.5	15.0	31.3

In general this table parallels that obtained for the reading of books except that the percentages of those not reading any pamphlets are lower throughout all socio-economic classes and for the entire group.

The following summary presents the percentages who read articles on child care in newspapers and periodicals:

Child Care Articles	Mother, Per Cent	Father, Per Cent
Newspapers only	8.0	6.8
Magazines only	6.4	4.2
Both newspapers and magazines	73.8	36.6
Neither	11.7	52.4

Seventy per cent of the families do not take magazines on child care, 20 per cent take one magazine, 6 per cent take 2 and 4 per cent take over 2.

The questions whether the mother and father listen to talks on child care over the radio brought forth the following:

Child Care Radio Talks	Mother, Per Cent	Father, Per Cent
Listens regularly	9.8	3.2
Listens irregularly	42.3	22.7
Never	47.9	74.2

Queries on attendance at study groups and parent teacher associations results in the following statement of attendance:

	Mother, Per Cent	Father, Per Cent
Study group	18.8	2.8
P. T. A.	17.8	9.6
Both	9.2	0.7
Neither	54.2	86.8

Since the parents here studied were those of pre-school children and not so likely to be interested in the P. T. A., it is likely that these figures are low. Their chief interest is in a comparison of the mothers' and fathers' attendance. Mothers are much more likely to attend these types of meetings.

Three per cent of the parents had made use of a day nursery, 5.1 per cent of a nursery school, 1.5 per cent of a settlement, 22.9 per cent of an infant welfare clinic, 27.7 per cent of a public health nurse, and 3.7 per cent of a social agency other than those listed.

A question as to how often the mother and father agreed on the management of children, brought forth in 90 per cent of the cases either 'always' or 'usually.' The remaining 10 per cent indicate various degrees of disagreement.

The material available on the size of family, ages, school records, and other data relating to the children in the family, as obtained from the family blank, will be analyzed in detail in the final report.

Summary

In summary we may say that the typical family of the young child consists of a father and mother with whom he lives. The father and mother are in their thirties, the mother being four years younger than the father. Usually no person other than those of the immediate family is found in the home. Both the father and mother are likely to have had a grammar school education with some additional work in high school. The mother is not likely to be employed outside the home. Reports on illness for both the mother and father show that they are rarely ill. In the home are found from twenty-five to one hundred books. In the house there are about 6 different types of toys and in the yard at least one permanent piece of play material. Families live within three-fourths of a mile of a playground. The chances are about fifty-fifty that the parents read one book on child care a year, which they own rather than secure from a library. It is somewhat more probable that they read a pamphlet on child care. The mother is very likely to read articles on child care in both newspapers or magazines and the father also pays some attention to them. It is not probable that they take a child care magazine. While it is not likely that they listen to talks on child care over the radio, or attend a study group or Parent Teacher Association, there is much greater probability of the mother doing this than the father. It is not likely that they have had contact with a social agency, clinic or even a public health nurse. They 'usually' agree on the management of their children.

THE LIFE OF THE FOUR-YEAR-OLD CHILD

We may now turn to a description of the life of the young child as obtained from our interviews. It should be remembered in all the subsequent discussions that the material presented is based upon the group of four-year olds on whom data were collected and not upon the entire series of age groups. Moreover in this summary not all of the material obtained on the four-year-old child is presented. This analysis and the more complete studies of the interrelations of the various factors in the life of the child will be presented in the final report.

Weighing, Sleep and Diet

Our first questions were concerned with whether the child was weighed regularly or not. Forty per cent of the four-year olds are weighed regularly and 60 per cent are not. Of those who are weighed regularly, one-tenth are weighed weekly, one-half monthly, one-fourth half-yearly, and the remainder are weighed at intervals greater than a year.

The data on the length of sleep and of naps are too detailed for presentation here and will be reserved for the final report. Through material available in the scientific literature we know that the four-year-old child usually sleeps eleven and a half hours out of the twenty-four and on the average, takes about three naps a week, and that he goes to bed between 7:30 and 8:00 in the evening and awakens at 7:00 in the morning. Our inquiry included a question on the number of other people who slept in the child's bedroom. In 43.8 per cent an adult slept in the four-year-old child's bedroom, in 36.3 per cent another child, and in 19.8 per cent of the cases no one slept in the bedroom with the child. Eleven and a half per cent of the four-year-old children sleep in the same bed with an adult, 27 per cent sleep in the same bed with other children, and 61.5 per cent have beds of their own. Usually the four-year-old child shares his bedroom with another person. About two-fifths share their bed.

The diet for breakkfast, dinner, and supper was recorded in detail for the day preceding the inquiry, together with the amount of milk consumed. The specific data on milk are of considerable interest. Of the children, 2.6 per cent had less than one-half pint of milk a day, 30.2 per cent had from one-half to one and a half pints of milk a day, 57.3 per cent had from one and a half to two and a half pints of milk per day, 6.5 per cent of the children had over two and a half pints of milk per day, and 3.5 per cent of the children had no milk.

In order to reduce the complex material on diet to a single and readily understandable form, the committee, with the assistance of nutritionists, prepared a scale on which the individual items of diet were given specific weights and a total obtained which represents qualitatively the adequacy of a particular diet. On the basis of 105 as a perfect score, there is presented in the following table the median scores on the diet rating for each of the socio-economic classes, together with the semi-interquartile range which indicates

the distance above and below the median in which the middle 50 per cent of the children fall.

TABLE XVIII

DIET RATING BY SOCIO-ECONOMIC STATUS

Class	Number	Median Score	Semi-Interquartile Range
I	48	95.0	7.5
II	62	95.3	8.3
III	141	88.6	10.9
IV	105	86.3	12.3
V	103	87.2	12.1
VI	46	72.0	13.5
VII	45	74.2	15.3

In general, the better the economic status the more adequate is the diet. Further, the amount of variation as expressed by the semi-interquartile range increases from socio-economic Class I, the professional group, to Class VII, the unskilled labor group.

A query as to the use of cod liver oil or a substitute reveals the fact that 41 per cent of the children have cod liver oil in the winter only, 1½ per cent in the summer only, 10 per cent have cod liver oil all the year around, and 47.5 per cent never have cod liver oil.

Of these children 30.9 per cent usually eat between meals, 25 per cent occasionally eat between meals, 28.5 per cent seldom eat between meals, and only 15.6 per cent never eat between meals. The question as to the regularity of the meal hour indicates that in 96.4 per cent of the homes, meals are served at regular hours and that in 95.4 per cent of the homes, the tables are set for all meals.

CLEANLINESS AND HABIT TRAINING

The next phase of our inquiry was concerned with the cleanliness and the habit training of the child. Eighty-six per cent of the four-year children have their under garments changed twice a week, another 12 per cent have their under garments changed weekly, and 2 per cent have them changed less frequently than once a week. Suits or dresses are changed daily in 86 per cent of the cases, twice a week in 12 per cent, weekly in 1½ per cent and

less frequently than once a week in one-half per cent of the cases. Ninety-four per cent of the children have sleeping garments.

In Table XIX are presented the figures on the number of baths a month in summer and winter.

TABLE XIX

FREQUENCY OF BATHS IN FOUR-YEAR-OLD CHILDREN

Baths	Summer, Per Cent	Winter, Per Cent
Oftener than daily	5.4	0.0
Daily	63.8	24.3
Twice a week	24.5	51.0
Weekly	6.3	24.6

The information in the preceding table is checked by a study of the length of time since the child's last bath. Twenty per cent had had a bath on the day the interview was made, 44.8 per cent preceding day, 15 per cent two days previous, 7.4 per cent three days previously, 5.1 per cent four days previously, 3.8 per cent five days previously, and 4 per cent six or more days before the interview was made. In general, in the summer months four-year-old children have daily baths, and in the winter months have baths twice a week.

In 99.1 per cent of the children bowel control, and in 97.1 per cent bladder control were established at the time of inquiry. Check questions as to bowel and bladder accidents on the day and night preceding the interview confirmed these figures. Both bladder and bowel control are well established at the age of four years.

The results of questions on the age at which bowel and bladder control were established is shown in Table XX.

The responses indicate that control is obtained somewhat earlier in girls than in boys and that by the age of two years all but a few children have both bowel and bladder control. The percentage of children over two years who lack bowel control is 9.7 per cent for boys and 4 per cent for girls; for bladder control 14.4 per cent for boys and 9.6 per cent for girls. Ninety-three and eight tenths of the children go to the toilet by themselves; of the 6.2 per cent who do not go to the toilet by themselves, all make the necessity known.

Of four-year-old children, 13.3 per cent have no toothbrushes,

10.9 per cent have brushes but do not use them, 1.2 per cent use some one else's brush, and 74.7 per cent have brushes of their own and use them.

TABLE XX

AGE AT WHICH BOWEL AND BLADDER CONTROL WERE ESTABLISHED

Age	Bladder, Per Cent		Bowel, Per Cent	
	Boys	Girls	Boys	Girls
0–8.9 months	5.7	5.2	12.6	15.7
9–14.9 months	21.8	28.8	19.2	30.9
15–20.9 months	27.9	32.8	25.1	24.7
21–26.9 months	30.2	23.6	33.4	24.7
27–32.9 months	7.2	3.2	5.9	1.8
33 months and over	7.2	6.4	3.8	2.2

Data on whether the child is able to dress himself show that 21.3 per cent of the boys dress themselves completely, 66.6 per cent dress themselves partially, and that 12.3 per cent do not dress themselves at all. Among the girls 42.4 per cent dress themselves completely, 53.3 per cent dress themselves partially and 4.4 per cent do not dress themselves at all. Whether the superiority of the girls is due to an actual difference of development or to a factor such as the simpler construction of girls' clothes can not be determined from our data. For comparison our data on feeding habits show that only 1.8 per cent of the boys and 3.6 per cent of the girls do not feed themselves.

A query with reference to how often the child sucks his thumb shows that 3.3 per cent of the girls usually suck their thumbs, 4.5 per cent do so occasionally, 6.3 per cent do so only at bed time and that 85 per cent never suck their thumbs. Among the boys 3.4 per cent usually suck their thumbs, 3 per cent occasionally, 3 per cent only at bed time, and 90.6 per cent never suck their thumbs. Girls seem to show a slightly greater tendency in this direction than boys. With reference to stuttering, we find that only 0.4 per cent of the boys usually stutter, 7.6 per cent occasionally do so, and 92 per cent never stutter. Among the girls 1.9 per cent usually stutter, 4.4 per cent do so occasionally and 93.7 per cent never stutter. Here again there is a slight sex difference in the

direction of greater stuttering among the boys. No particular weight can be placed upon the sex differences unless they are verified in the analysis of the other age groups in sucking the thumb and stuttering. The likelihood of a four-year-old child whether boy or girl, sucking his thumb or stuttering is slight.

Medical Care and Diseases

Our next group of queries concerned the medical care and the diseases of the child. Here complete analysis of the data must await the final report. Among four year old children we find that 75.6 per cent have been given a fairly complete medical examination and that 24.4 per cent have not. A query as to the time since the last examination shows that in about a third of the cases the last examination had taken place within three months of the report; in about one-fifth of the cases from three to six months previous to the report; in a quarter of the cases six to twelve months previous; and in another quarter of the cases over twelve months before the interview. Examinations of farmers' children had been given less recently than those of any other group. Clinics made 18.5 per cent of the examinations, nurses, 3 per cent; the family physician, 47 per cent; a pediatrician, 13 per cent; a specialist, 7 per cent; and school physicians, 10 per cent. To the query as to whether the last examination was made for illness or as a preventive measure we find that in 36 per cent of the cases it was made for illness and in the remaining 64 per cent of the cases as a preventive measure.

In Table XXI a summary of the data on the proportion of four-year-old children who have been vaccinated or inoculated and the proportion who have had various diseases.

Approximately one-fifth of the children were reported as being troubled with constipation, one-eighth with colic and indigestion, and slightly over one-half as being troubled with colds and coughs.

A query as to how many days in the last six months the child has been sick in bed shows that 64.6 per cent of the children had spent no days in bed, 21.1 per cent from 1 to 6 days in bed, 7.9 per cent had spent from 7 to 13 days in bed, 4.1 per cent had spent 14 to 28 days in bed, and that 1.4 per cent had spent from 28 to 40 days in bed.

The interpretation of these data on the medical care and disease of children must be undertaken with some care. It must be

remembered that the information was secured from the parents by interview. Most of the questions were quite specific and in such form that if the parent had definite knowledge he should have been able to answer them. The material can be checked against other sources of material available to the conference, and in our final report will be checked against other ages.

TABLE XXI

FREQUENCY OF INOCULATION AND DISEASE

	Per Cent Vaccinated or Inoculated	Per Cent Having Had Disease
Diphtheria	33.8	1.5
Smallpox	26.0	0.7
Typhoid	5.7	0.0
Scarlet fever	1.8	4.4
Whooping cough	0.2	37.5
Colds	0.2	
Measles		31.8
Chicken-pox		29.0
Infantile paralysis		1.1
Mumps		9.7
Pneumonia		2.6

In general there are some surprises in the data. More children have had a preventive physical examination than had been expected, and more four-year-olds had been inoculated for diphtheria than had been vaccinated for smallpox. The percentage of parents who report that their child has been troubled with colds and coughs is high. Data available from the nursery schools indicate that the cold and cough is the most persistent source of trouble and the one that accounts for the highest proportion of absences among children.

METHODS OF CONTROL

Only a small number of children are never punished, as shown by a figure of only 2.2 per cent for the boys and 4 per cent for the girls. Among the boys, 20.6 per cent are punished only by the mother, 1.1 per cent by the father only, 72.8 per cent by both the father and mother, and 1.5 per cent by other individuals. The

girls were punished in 29.4 per cent of the cases by the mother, in 7 per cent by the father only, in 68.4 per cent by both the father and mother, and in 1.5 per cent by other individuals. Aside from a slightly greater tendency for girls to be punished by the mother, there is relatively little difference between the two sexes.

Our next question concerned the number of times the child had been spanked in the last month preceding the interview. It was reported that 29.3 per cent of the boys and 27.7 per cent of the girls had not had a spanking in that period. The data on the distribution of the number of times spanking was done where children received a spanking, shows that 11.2 per cent of the boys had been spanked once, 12.2 per cent twice, 9.2 per cent three times, 0.1 per cent four times, and 27.6 per cent five times or over during the preceding month. Among the girls 15.9 per cent had been spanked once, 13.2 per cent twice, 12.3 per cent three times, 6.4 per cent four times, and 24.6 per cent five or more times during the preceding month. Apparently girls of this age are as likely to be spanked as boys and as frequently. In general, spanking seems to be a very frequent mode of control.

A further analysis of the other methods used for controlling the child shows that 21.8 per cent of the parents utilize ignoring; 51.9 per cent scolding; 77.3 per cent reasoning with the child; 34.1 per cent deprivation of pleasures; 28 per cent putting to bed; 9.4 per cent comparing the child unfavorably to another; 33.9 per cent putting the child on a chair or in a corner; and 6 per cent use methods not listed on the blanks. In general, parents use several methods rather than one exclusively.

Emotional Life

Several questions concerning the emotional life of the child were asked. It was found that in 44.1 per cent of the cases of the boys and 40.9 per cent of the cases of the girls there were no objects to which definite fear had been shown. Of the boys, 20.1 per cent had shown fear of dogs, compared with 23.1 per cent of the girls; 15.7 per cent had shown a fear of the dark as compared with 18.1 per cent of the girls; 18.2 per cent had shown a fear of storms as compared with 14.8 per cent of the girls; 6.2 per cent of the boys had shown a fear of strangers as compared with 8.7 per cent of the girls; and 1.7 per cent of the boys and 2 per cent of the girls had shown fears of other objects. The analysis of the procedure of

removing fear shows that in 17.1 per cent of the cases nothing is done to remove fear, in 18.9 per cent of the cases soothing is used as a method, in 14.6 per cent of the cases the attention is diverted, in 57.4 per cent of the cases an attempt is made to explain the situation and in 4.9 per cent some other device is used.

The answers to the questions on the child's favorite in the home show that for 26.7 per cent of the boys the mother is the favorite, for 16 per cent the father, for 4.6 per cent the sister, for 3.4 per cent the brother, and that for 42.9 per cent there is no favorite. Among the girls, 19.6 per cent select the mother as their favorite, 15.1 per cent the father, 4.9 per cent the sister, 1.9 per cent a brother, and 58.5 per cent have no favorite.

Other statistics disclose that 5.8 per cent of the boys and 6.9 per cent of the girls manifest jealousy when affection is shown by the mother to the father; 7.3 per cent of the boys and 7.6 per cent of the girls manifest jealousy when affection is shown by the father to the mother; 17.1 per cent of the boys and 16.3 per cent of the girls manifest jealousy when affection is shown by the mother to the other children; 8.8 per cent of the boys and 11.2 per cent of the girls manifest jealousy when affection is shown by the father to another child; finally, 6.9 per cent of the boys and 6.9 per cent of the girls do not manifest jealousy on these occasions but did under other circumstances. It was further found that 60.2 per cent of the boys and 64.6 per cent of the girls showed no evidence of jealousy.

These data on fears, the emotional reactions to favorites, and jealousy are of considerable interest: First because of the large proportion of the children who gave no evidence of positive and decided reactions; and second because, since the sex differences are so slight, the conclusions differ markedly from some of the popular statements made about children's emotional life.

Intellectual Life

A list of simple intellectual performance was given and the proportion of children doing each determined. One-tenth of the children were learning to read; over three-fourths had learned or were learning to count; two-thirds had learned or were learning rhymes; about two-thirds had learned or were learning prayers; three-fifths had learned or were learning songs; one-third had learned or were learning the alphabet. Ninety-eight per cent of the chil-

dren had given evidence of having made attempts in five or more of these categories. About half the children have a favorite book or story and the other half do not. In one-quarter of the cases the mother only had read or told a story to the child on the day preceding the interview. A negligible percentage of fathers had told or read a story to the child on that day. In one-fifth of the cases, both the father and the mother had told or read stories. In over half the cases neither the father nor the mother had told or read a story to the child on the preceding day. Six and nine-tenths per cent of the parents report that the child had asked the questions as to where babies come from, and 73.1 per cent reported that the question had not been asked. Of those who had asked the question, a negligible percentage had asked it under the age of 3 years, about one-third of the children had asked the question between 3 and 4 years; almost two-thirds of the children asked the question between 4 and 5 years.

Social Life

A query as to whether a child was restricted when unsupervised shows that 4.9 per cent of the boys and 5.7 per cent of the girls were restricted to their homes; 50.8 per cent of the boys and 54.3 per cent of the girls were restricted to their home yards; 15.9 per cent of the boys and 15.8 per cent of the girls were restricted to the block; 18.9 per cent of the boys and 17.4 per cent of the girls were restricted to the neighborhood; and 9.5 per cent of the boys and 6.8 per cent of the girls were not so restricted. Queries on play with other children show that 14.9 per cent of the boys and 18.1 per cent of the girls play with other children only within their homes; 4.1 per cent of the boys and 5.9 per cent of the girls play with other children only when elsewhere; 79 per cent of the boys and 73.4 per cent of the girls play with other children both at home and elsewhere; 2.8 per cent of the boys and 2.2 per cent of the girls do not play with other children.

The question as to whether the child played out doors the day preceding the interview was answered in the affirmative in 98 per cent of the cases. An analysis was made of the number of hours of outdoor play during the preceding day. This analysis shows that about 10 per cent played outside from one to 4 hours; about 70 per cent played outside 5 to 8 hours; and about 20 per cent 12 hours. There is some evidence from the data of a slight tend-

ency for children of the upper socio-economic classes to play outside for longer periods of time than do those in the lower groups.

The next question concerns itself with the place in which the child plays. Of the children, 4.7 per cent played in the street, 6.3 per cent in the park, 8.7 per cent in a vacant lot, 62 per cent in the neighbors' yards or homes. Of the girls, 8.7 per cent played on a playground, while the remainder, 4.7 per cent of the children played on the sidewalk, in an adjacent school yard, or some other similar place.

Movie attendance data reveal the fact that 58.5 per cent of the boys and 64.4 per cent of the girls had at some time attended. Sixty per cent of the children had attended the movies one to 2 times during the month preceding the interview, 33 per cent 3 to 4 times, and 7 per cent 5 or more times during the month.

Summary of the Life of the Four-Year Old

The picture of the four-year old as obtained from these data is as follows. He is not likely to be weighed regularly, usually sleeps eleven and one-half hourse out of the twenty-four and in a room with some other person but in a bed of his own. He drinks from one and a half to two and a half pints of milk a day and is likely to have a fairly adequate but not a perfect diet. The adequacy of his diet depends in part on the economic status of his parents. The chances are about even that he has cod liver oil in the winter. It is almost certain that he will not have it in the summer. He will occasionally eat between meals. His meals will be served at a regular hour at a table that is set.

His undergarments are changed twice a week, his suits or dresses daily, and he has a sleeping garment. During the summer he has a daily bath and during the winter two baths a week. He has acquired bowel and bladder control both during the day and night. He owns a toothbrush and uses it. He does not dress himself completely as yet. There is very little chance that he sucks his thumb or that he stutters.

He has had at least one complete medical examination, usually within the preceding year, made by the family physician. The chances are 1 out of 3 that he has been inoculated for diphtheria, 1 out of 4 that he has been vaccinated for smallpox, 2 out of 5 that he has had whooping cough, 1 out of 3 measles; also the chances are 1 out of 3 that he has been vaccinated for chicken pox, 1 out of

10 mumps, 1 out of 20 scarlet fever, and 1 out of 40 for pneumonia. He is more likely than not to be troubled with colds and coughs. The chances are exceedingly slight that he will not be punished. There is somewhat more probability of punishment by the mother than by the father. He is likely to have one to four spankings a month. In controlling him, the parents in addition to occasional spankings are apt to scold him or reason with him. They are not likely to compare him unfavorably with another child, but may put him to bed or in a corner. The chances are about even that the child has a definite fear. If he has a fear, an attempt will be made to explain the situation, rather than to sooth or divert him. He does not have a favorite in the household, nor is he likely to show jealousy. The chances are even that he will have a favorite book or story. He will be read to or told a story by his mother rather than by his father. He can count a little, has learned rhymes, songs and prayers but has not learned the alphabet. He has shown little curiosity about the origin of babies. He tends to be restricted to his home yard in his play and probably plays with other children both at home and elsewhere. Usually he plays outdoors from five to eight hours during the day, either in neighbors' yards or his own. The chances are even that he has attended the movies. If he attends, he goes once or twice a month.

RECOMMENDATIONS

In concluding its study, the committee submits recommendations of two kinds: general and specific. In summarizing those of a general character, the committee recommends:

1. Widest possible recognition of the period of training the young child for health.
2. A program for attaining this recognition based on research intended to establish standards of development and accomplishment and to determine limitations of the developmental period.
3. A broadly conceived program of pre-parental and parental education as the most effective means of modifying the education and training of the young child in the home;
4. Health supervision by a physician qualified in the care of children at every institution for the educating and training of young children.
5. Daily inspection of children upon their arrival at institutions and isolation of those who are ill or who show symptoms of illness.

6. Development of standards of care and training for institutions through activities of governmental organizations and federations of institutions.
7. Particular attention on the part of institutions to the level of training of persons responsible for the children in the institutions.
8. A study by municipalities considering legislation on minimum space requirements, sanitary equipment, and fire protection, of reports of this conference, of governmental agencies, and of the various federations.
9. The direction of institutions' attention to fire protection appliances and procedure in emergencies; and
10. Improvement of the system of records of individual children, medical examinations, diets, and all procedures of the institution.

The committee recommends specifically:

1. Assisting day nurseries with suggestion, advice or planning in the problem of reducing the load on the staffs and providing more equipment and play space;
2. The encouragement of ventures in nursery school education;
3. Instruction and encouragement of the parent in his educational function;
4. A wide-scale study of normal children in all aspects of their living as the first step in parental education; and
5. Consideration of the possibility of developing through Federal and State cooperation a series of organizations carrying on both a research and a parental education function.

General Recommendations

Since the training of the young child for health is a function of his entire handling, rather than the giving of formal instruction, no separation of health education and general care and training can be made. The outstanding problem of the period is the establishment of basic habits of physical care and of attitudes and adjustments toward objects and persons. The physical and mental health of late years is built on the foundations of the early years. The committee therefore feels that the widest possible recgonition should be accorded this important period.

First of all, recognition involves effective research in a number of scientific fields over a wide area, to establish standards of development and accomplishment, and to determine the possibilities and limitations of the developmental period. Such research should be concerned quite as much, or even more, with the typical or 'normal'

child as with the special groups of children suffering from disabilities or handicaps. Before a sound program can be laid out, the facts upon which that program is to be based must be determined.

Second, recognition involves the organization of methods for bringing knowledge of the development of the child and of methods for his care and training to those individuals in society who are directly responsible for him. In the pre-school period, these are not primarily persons connected with institutions, nurses, teachers, or specialists, but are the parents of the children. No forward looking program for the education and training of the infant and young child can neglect this fundamental fact. Therefore, while use should be made of institutions, nurses, teachers, and other specialists, the solution lies in a broadly conceived program of parental education, which on the one hand utilizes the facilities now existing for training young people in advance to meet the responsibilities of parenthood; and on the other hand, through the cooperation of governmental agencies, educational institutions, and welfare organizations, builds up methods for the education of parents, actually on the job in caring for and training their children.

In institutions for young children, regardless of type, the problem of effective health supervision is of great importance. The bringing together of children in groups during the period in which there is greatest susceptibility to infection, increases the danger of contagion and puts a heavy responsibility on those in charge. Every institution established for the education and training of young children should have available, either directly on its staff or through cooperation with some other agency, a physician qualified in the medical care of children.

Through the medical service thus developed, provision should be made for an inspection of the children at the time of their first coming each day, and provision also for isolating or sending home children who are ill or show symptoms of becoming so. Preferably this inspection should be given by a nurse under the supervision of a physician. It should never be considered a mere formality.

Through the activities of the various governmental organizations and through existing federations of institutions, standards of care and of training for institutions should be developed. The committee would like to call attention to the excellent publications of the Children's Bureau of the United States Department of Labor, to the publications of the Pennsylvania Department of Welfare, and to the work of the National Committee on Nursery Schools,

the National Federation of Day Nurseries and various city federations. On the whole the committee feels that the problem is largely one of the education of those responsible for the policy and program of each institution rather than one of regulation by legislation—at least, in the present state of the development of institutions for child care.

The committee would urge very strongly that all institutions undertaking work with young children give particular attention to the level of training of the persons who are to have the responsibility for the children. Obviously, the success of any effective program for education and training is dependent upon the previous training, the professional spirit and the techniques which the personnel have acquired. At the present time standards are fairly high in nursery schools and are rather low in day nurseries and institutions of the relief type. Any marked future development of the educational possibilities of these institutions must come through the intelligence, interest, and effective utilization of resources by the persons who are in direct contact with children. With the development of small private nursery schools, independent of educational organizations, a similar problem will arise and must be faced by those most interested in the development of sound practice. While the day when public supervision of the qualifications for teachers in institutions undertaking educational functions with young children will come, nevertheless at present, it is unlikely that as much progress will be made by legislation as by the dissemination of information and the education of those responsible for the work.

At the present time problems of legislation with respect to minimum space requirements, sanitary equipment, and fire protection are arising in communities faced with the emergence of institutions for young children. Specific reference is made to nursery schools in large centers of population. While our committee on the basis of its studies cannot outline the needed regulations, it nevertheless recognizes the importance of the problem and suggests that municipalities facing it familiarize themselves with the reports of this conference, of governmental agencies, and of the various federations before undertaking any extensive program of legislation. The questions here involved deserve much study since somewhat different problems arise when young children are brought together in groups, than when older children are so brought together.

One of the most important problems in the entire field is that

of adequate fire protection both in the way of physical appliances and in the procedure to be followed by staff and children when an emergency arises. There is so much variation from institution to institution that no very general conclusions can be made. The more vigorously the problem can be called to the attention of those administering institutions the greater will be the modification of present procedure which is likely to result.

As one of the specific steps in the development of an adequate educational program in institutions of this sort the committee strongly recommends the improvement of the system of records which are kept of individual children, of medical examinations, of diets and of all the other procedures of the institution. In general, the better the record system of the institution, the more effectively can improvement in practice be undertaken and the better the basis upon which such modification can be made.

Specific Recommendations

The committee finds that the chief problems in the day nursery field which require attention in any consideration of the effective utilization of the institutions for health education and training are, first, the heavy load of the teachers or matrons, with respect both to the number of hours' service given per week and the number of children handled per individual teacher or matron, and, secondly, the inadequate equipment and play space. The committee would point to the development of the relief nursery school, revealed in its studies to be a rather distinct type of institution, as the most promising tendency in this field. Apparently a number of day nurseries, becoming aware of the possibilities of an educational program, are modifying their own activities in the direction of the nursery school program. They are reducing the load on the staffs, providing more equipment, and developing an educational policy.

Any encouragement, assistance, or specific aid in the way of suggestion, advice or planning that can be given the day nursery as a means to this end should be encouraged. At the present time the day nurseries as a group seem to be aware more than ever before of the problem and are in a healthy state of transition to a more clearly defined program in terms of the objectives of physical and mental health.

In view of the fact that the nursery school is a relatively new institution and that it exists at the present time in a variety of

forms the committee does not feel that strenuous attempts at standardization or formalization should be undertaken. It recognizes the fact that the nursery school is not a fad, but is an attempt on the part of society to meet new social conditions characteristic of modern life. Among these social conditions are apartment house living, small families, and the relative isolation of individual children. The committee feels that the ventures in nursery school education now under way should be encouraged and hopes that out of the social experimentation now going forward a more adequate realization on the part of the public—of the physical, mental, and social needs of young children will arise.

In the third of its general recommendations the committee expressed the view that a broadly conceived program of pre-parental and parental education would be the most effective means of modifying the education and training of the young child in the home. While its studies reveal a wide variation in home practices, nevertheless they are encouraging when one considers them in detail and indicate that the standards of care of the young child in the American home are better than had been expected. On the other hand, out of its studies there comes a realization that physical care is on a somewhat more effective level than is training for mental and social adjustment. What seems to be needed is first of all a recognition on the part of professional groups that the parent is himself a teacher as well as a parent and needs instruction assistance, and encouragement in his educational function quite as much as do professional workers with children. Such assistance must be adapted to the level of the parent.

This committee has concerned itself very little with the mechanisms through which parental education should be undertaken since it feels this to be a function of Committee III A, "The Family and Parental Education," of this section. No student of the life of the infant and young child in its broader aspects can fail, however, to be cognizant of the underlying importance of the parent.

As a first step in the development of such a program the committee feels that the study of normal young children, in all aspects of their living, should be undertaken on a wide scale. In the past the approach to the problems of the young child has too often been from the arm chair and too little from concrete studies of the lives of young children. The committee hopes that at some time in the future it will be possible to make accessible to parents the basic facts of child development, adequately determined by sci-

entific research. It views its own studies of the child in the home, carried out under the auspices of this conference, and the collation of scientific material undertaken by Section I of this conference, as a step forward. At the present time the preparation of an optimal program for the young child must wait upon the results of investigation. The committee hopes, on the basis of the complete analysis of the data which it has available, to point out the specific areas in which more information is needed and to formulate suggestions with regard to such a program.

The committee suggests consideration of the possibility of the development through the cooperation of the Federal Government and the States of a series of organizations which at the same time carry on a research and a parental education function. This type of organization has already been tried with considerable success in the agricultural experiment station and the agricultural extension service. A type of organization which is as successful in meeting the scientific and practical problems of the farmer in raising cattle, hogs, and corn might also prove successful in solving the pressing problems of the parent and child. Mutual cooperation of the research agency and the agency for the dissemination of information works to the advantage of both in a field in which there are so many questions of a fundamental and practical character.

The committee has no specific recommendations to make with reference to the conduct of kindergartens. It does, however, feel very strongly that many of the private kindergartens now in existence owe that existence to the absence of adequate kindergarten facilities in the public school system. Only one-fourth of the children between 5 and 6 years in the United States are enrolled in kindergartens. It seems to the committee that the kindergarten has more than demonstrated its usefulness, considered from either the angle of the school or from the angle of its value to the individual child. Anything that can be done publicly or privately to make state and municipal organizations aware of the importance of the kindergarten and facilitate its development as a part of the public schools will receive the hearty endorsement of the committee. Certainly before undertaking any widespread public education of young children below the age of 5 years, our nation should develop its facilities for the education and training of five- and six-year-old children to the maximum.

Conclusion

In conclusion the committee wishes to express its feeling that the period of early childhood is of great importance in the development of the individual and in the preparation of the future citizen, and wishes to urge upon the entire Conference and the American public which it represents, the most serious consideration of the needs and possibilities of a program for the well-being and protection of the young child.

C. COMMITTEE ON THE SCHOOL CHILD

THE health of 27,100,000 children in the schools of the United States, more than a fifth of the nation's population, is considered in this report. Of these, 22,800,000 are in elementary schools and kindergartens, and 4,300,000 in secondary schools. Although children spend only 4 to 6 hours out of each 24 in the day in school, these few hours are of great importance in developing and conserving child health. With the greater mobility of our population and the trend toward city life, the school must take over much of the responsibility for education which formerly was taken care of in the family. The school is the community's official and supported agency for education. It is the universal, the officially accredited and the strategic institution for organizing and directing the education and the health-care of the child of school age. John Dewey has said, "What the best and wisest parent wants for his own child, that must the community want for all of its children." Society depends upon the health of each one of its members for its most complete realization and prosperity.

INTRODUCTION

The school, at least in announcement of principles and aims, has already definitely recognized health as one of its cardinal objectives. Schools should provide healthful surroundings and administration; secure the best attainable health of all pupils through cooperative effort; provide and encourage healthful activities; and inculcate favorable attitudes and ideals toward health through sound basic knowledge. It is of fundamental importance to recognize and always to remember, that the school, in performing adequately its service to child health and health education, should provide full cooperation with the home without taking away from the fundamental privilege or responsibility of the home in relation to its children.

The conception of health here presented is not one of physical health alone, but of mental, emotional, and social health as well. The positive aspects of health are emphasized in this report.

Health is a condition of organic soundness and adequate functioning which permits the individual to realize the fullest expression and development of his best self, attain his highest usefulness, and achieve his greatest happiness. Health should be thought of as a condition involving abundance of life and vitality, strength of body and mind, and ability to do things more satisfactorily.

With this all-enveloping concept of health the Committee on the School Child pleads that the school be conscious and appreciative of the child as an individual. The child must be seen as a whole. We cannot remind ourselves too often that it is the child that concerns us, not the physical body alone, not the mental or emotional life alone, but the whole child, since he cannot be divided into component parts. Hence the education of the child should be integrated into one effective whole. Send the whole child to school, train the child as a whole while in school, and send the whole child out when leaving school with the best that education can give him, that he may be more adequately equipped to live life abundantly.

WHAT THE SCHOOLS CAN DO

A comprehensive school health program demands the following minimum essentials:

1. A sanitary and healthful school plant located, constructed, equipped, and operated according to scientific health principles.
2. A health examination or inspection once a year for every child, and a dental inspection twice a year, if possible. The health examination should include consideration of mental, emotional, and social as well as physical health.
3. Follow-up health service by school or district nurse, or by visiting teachers, to advise the home regarding the defects discovered in examination and inspection, and their correction by family physician, health authorities, clinic, hospital, or other social agency. The correction of health defects should include immunization when needed against diphtheria and smallpox.
4. A daily health inspection of each pupil conducted by teachers with the cooperation of school nurse and physician, to discover and to exclude from school those children showing signs of health disturbance such as coughing, sneezing; running eyes, ears, or nose; headache; earache; or skin eruption. Re-admission after exclusion should be on the ad-

vice of a physician or nurse and only after convalescence is complete.

5. Healthful procedures in methods and materials of instruction; in arrangement of programs; in length of school day; in examinations and tests; in arrangement and supervision of recesses; in requirements of home study; in frequency and length of vacations. Mental hygiene expressed in provision for a suitable task for every child; the adjustment of tasks to the sequence of the stages of individual development; preventive discipline, respect for the personality of each pupil; and study and understanding of each child from the genetic point of view.
6. Adequate health education. Educationally sound instruction in health should be given to the child each day from kindergarten through high school. He should grow naturally into habits, attitudes and knowledge of physical, mental, emotional and social health, without much direct consciousness of personal health. Such instruction should be given whenever the opportunity arises for the practical application of some idea or principle regarding health. With this plan of informal learning of health through practical activities it is apparent that every teacher in the school must teach health. In secondary schools a special course in health education should be given.
7. A complete cooperative health program. While more important quantitative contributions are made to the school health program by physicians, nurses, dentists, dental hygienists, health counselors and advisers, and by the instructors in science, biology, nutrition and physical education, still the optimum success of the work for the health of school children depends very definitely upon the help and cooperation of every subject in the curriculum and of every teacher and other person employed in the school.
8. High standards of health for the school staff. The health of teachers, principals, janitors, and others employed in the schools, exerts vital and subtle influences upon various phases of health of the millions of children in the schools of our country. Of fundamental importance are the health standards and procedures which should be applied in the professional training, certification and selection of teachers, janitors, school executives and others, and in the supervision and services planned for the conservation and promotion of their health.
9. Cooperation of the home and the school so that all of the experiences of the child in the home and in the community shall contribute to a unified and comprehensive health program.

HYGIENE OF THE SCHOOL PLANT

Physical Environment

Each child must be safeguarded by a healthful physical environment during his entire school life. The school house should be safe and it should afford every protection to the life and health of each child attending it. School house facilities should be so developed that the demands of both the health and the educational program may be fully met. Ventilation, artificial and natural lighting, equipment and the maintenance and operation of the school, should be matters of concern to all parents and teachers. Classroom facilities should be maintained so as to insure the work of the school without impairing the sight, hearing, posture, or in any respect the health of any individual child. A well-constructed and well-planned school house on a large site, located in a satisfactory environment, should be demanded by every community. Current practices in these matters lag far in the rear of existing knowledge.

SITE, ENVIRONMENT, BUILDING

The school should be readily assessible to the population which it serves, but adequacy of site and wholesomeness of surroundings should not be sacrificed in the interests of central location.

The hygiene of the school plant demands consideration of the gross structure of the building itself. This should be planned with an immediate bearing on safety, with attention given to the material used in construction, and the arrangement of rooms, corridors, exits, and stairways.

FIRE PROTECTION

The possibility of injury or loss of life in school fires is of utmost importance to every parent. The school house involves problems in plan and construction not encountered in other types of buildings, largely because it is occupied and utilized by children and youths who are subject to panic on the slightest provocation. Even in the most modern and substantial buildings the possibility of at least minor conflagration, with its attendant dangers of panic and confusion, is not entirely removed. In older, less substantial buildings, poorly maintained, the dangers of possible fire are inevitably greater. School authorities in general are not fully

awake to the seriousness of their responsibilities in connection with fire hazard. Only accepted engineering principles and practices in the design and construction of different parts of the building should be allowed. The number of stairways should be sufficient to empty the building in three minutes or less. Two story buildings should have at least two stairways. Two ways of egress should be available from any class or assembly room. The school building should have signal connections with the local fire department, fire alarms and an automatic sprinkling system throughout.

HEATING, VENTILATION AND LIGHTING

Since children spend most of their time in school, in the classroom, special attention should be given to its planning in relation to health. The conditions which prevail as regards location, illumination, heating and ventilation, equipment, and general maintenance in the classroom are fundamental in the health program. Proper lighting, both natural and artificial, does much to prevent defective vision. Probably the demand and strain on the eyes of the school child are greater today than at any other time in our history. Adequate lighting serves to make the school work less fatiguing, more healthful and more interesting. Temperatures should be maintained at about 68° F.

EQUIPMENT, PLAYGROUNDS, AND GYMNASIUMS

School equipment, particularly chairs, tables and blackboards should be constructed to fit children physically, must be easily cleaned, and must have sufficient strength to safeguard children against injuries. In one survey, 56 per cent of the seats and 87 per cent of the desks were found to be too high. This condition is inexcusably frequent.

The program of physical education requires well-equipped play fields and gymnasiums. The gymnasium must be a hall of health of adequate size with an abundance of fresh air and sunlight. For the upper grades, lockers, dressing rooms, and shower baths must be provided in order that pupils may put on proper gymnasium clothing, and have adequate showers after the physical education class. The shower rooms, toilets, and locker rooms should be kept scrupulously clean and sanitary. A school house without an adequate playground is an educational deformity and presents a gross injustice to childhood.

SERVICE SYSTEMS OR SANITARY CONDITIONS

The health and well-being of children are influenced by those elements of the service system of the school with which every pupil comes into contact every day. Too great care cannot be exercised in seeing that these are such that the pupils will be able to meet their needs in decent, wholesome conditions, and will also be encouraged to the development of finer attitudes and habits. Adequate provision should be made for drinking, toilet and hand washing facilities. The educational value of a clean, sanitary, and wholesome environment is nowhere more apparent than here.

JANITORIAL SERVICE AND BUILDING OPERATION

To a very large degree the safety, sanitation, cleanliness and general desirability of a school building depend upon the efficiency with which the janitors and other responsible persons carry on their work. Sight is preserved by keeping window glass and blackboards clean. Other phases of health are preserved by the maintenance of sanitary and healthful conditions in classrooms, toilets, and other service rooms, and through the efficient operation of the heating and ventilation plants. Playgrounds and gymnasiums should be kept clean and so prepared that there will be a minimum of dust. The child's mental and moral attitude is influenced by the character and behavior of the men and women employed to operate the school plant. Great improvement in the quality of janitorial service in schools is imperatively needed. It is a new but important idea in education that janitors should be professionally trained for their work and should be held up to high standards of efficiency.

HYGIENE OF THE SCHOOL PROGRAM

It is fundamentally important that the school program be so arranged that the physical, mental, and emotional health of the child will be protected and improved.

LENGTH OF THE SCHOOL YEAR

A progressive educational policy should provide an educational and recreational program for the child throughout the year, and such program should be under the administrative control of the

Board of Education. The school program should be so adjusted that, through a proper relationship of the activities of the program, there will be no diminishing efficiency on the part of the child from day to day or month to month.

THE SUMMER VACATION

The long summer vacation has become a major problem in the education of the child. Vacation and school stand now as too much opposed: school is too formal, vacation too empty. Vacation, being less valued than school, at present, is more open to experimentation. Rightly managed it can lead the way to a truer and fuller regard for the whole child and thus help the school to see better its possibilities. The committee recommends that every school assume the responsibility of providing for the child, during his summer vacation, opportunities for healthful and creative activities.

LENGTH OF THE SCHOOL TERM

It is contended by some that the working efficiency of adults declines after 12 weeks of work without vacation. This belief has led to the adoption, in some sections of the country, of a school term 10 to 12 weeks in length, with a week of vacation intervening. The adoption of the new thirteen-month calendar would help in the adjustment of such a program.

LENGTH OF THE SCHOOL DAY

Six hours of work for children can be fairly set as a maximum. If homework is required, the school day should be shortened accordingly. A shorter day for younger children is advisable. If the school day extends beyond 6 hours it should include periods of supervised play.

RECESSES

No more than 3 hours of work without food should be expected of the school child. An advantage is realized from rest periods of 15 minutes during each half-day session. These should be periods of genuine rest, not play, with as complete relaxation as possible and real quiet. There should be abundant time for the noon lunch (at least an hour) depending on whether pupils go home.

VARIATION IN ACTIVITY

The program should be so arranged as to provide for alternation of subjects from the inactive to the active. Variety in teaching also provides diversion. Most difficult work should be given at the most favorable periods of the day. These are usually at the beginning of the school day or immediately following the mid-morning or mid-afternoon lunch.

HOME STUDY

Home study should be entirely eliminated in the first 6 grades in the elementary school, and has little to commend it in the high school. Supervised study at school during the school day is more satisfactory. The night is not a good time for work. If home assignments are made they should be simple and short, in the nature of light reading. The elimination of home study necessitates, in many instances, the lengthening of the school day, with greater variety in the program, and additional opportunities for study. In some high schools it has been found advantageous and practicable, without lengthening the school day, to make moderate assignments for study which pupils may do at home in the day time, free from the distracting influences caused by the presence of classmates and the social life of school.

Mental Hygiene of the School Program

The school program should be so organized that mental health may be stimulated and conserved, and maladjustments thus unlikely to develop. The principal points to be considered in relation to the school program in mental hygiene concern the curriculum, pupil placement, methods of instruction, and the social program. In relation to mental health, it is important to remember always the vital interdependence between the physical and mental conditions of children.

CURRICULUM

The curriculum should be planned with the interests of mental hygiene in view. Often pupils lose interest in school work or fail to make good progress in their learning because the curriculum is dry and antiquated, and far removed from their youthful interests.

The possibility of guiding youth into a life more vigorous, more realistic, more adequate, better integrated, and ever advancing, would be promoted by a more daring attack on curriculum reorganization.

PUPIL PLACEMENT

Our knowledge of individual differences shows us the necessity for some sort of grouping of pupils on the basis of their ability. Pupils of a given age differ widely in their backgrounds and experiences, their ability to learn, to acquire new experiences, and to solve problems. If a pupil is placed in a group where he is either not given activities that sufficiently stimulate him or if he is given tasks that are much too difficult for him to achieve a certain degree of mastery, bad mental health is bound to result. Pupils who are thus wrongly grouped soon develop other symptoms of maladjustment which exhibit themselves in introvert activities of daydreaming, sulking, or extrovert activities of boisterousness, defiance and the like.

METHODS OF INSTRUCTION

The problem of motivation is most important from the point of view of mental hygiene. Threats of punishment, sarcasm, and nagging are obvious malpractices which can only lead to bad mental habits. The competitive motive often approved by educators helps to foster feelings of inadequacy and inferiority in the vanquished, and equally often, undeserved feelings of superiority and triumph in the winner.

Tests and examinations have been criticized from the standpoint of mental hygiene. They are of value primarily in helping pupils understand themselves, their progress in learning, their limitations, and in enabling teachers to determine the efficiency of certain methods of study and instruction. The classroom should be recognized above all as a place where social adjustments are affected, and good human relationships are achieved.

THE SOCIAL PROGRAM

The school should furnish an opportunity for learning habits of social adjustment, and the extra-curricular program of the school contains important mental hygiene and social health values. Children need recreation and the school should provide opportunities

for playing and working together in addition to sufficient opportunities for healthful activities out of school. A curriculum, planned with consideration of mental health, would include such extra-curricular experiences as would help the pupils discover and develop an appreciation of and devotion to the world of nature. This appreciation would help form a basis for the wholesome habits and attitudes of leisure time which are so vitally needed today.

DISCIPLINE

In discipline the aim should be less to punish the child than to remedy the situation which is irritating him. Discipline, conceived as obedience, involving punishment if there are infractions of rules, has been largely outgrown. Discipline as mental hygiene consists in helping the child to an inner adjustment, in helping him to recognize his own conflicting desires, in helping him to substitute socially valuable behavior for those of his wishes which are ethically or aesthetically undesirable. There will always be some children who do not respond to this type of discipline. Such children should have the benefit of careful study by the person, or persons, best qualified to secure desirable readjustment.

EMOTIONAL DEMAND

Conditions which arouse the emotions, such as nagging, quarrelling, fear, and over-excitement should be avoided. An exacting, over-conscientious, nagging teacher may add to the fatigue of children. Freedom, happiness, encouragement, sympathy, help to prevent fatigue.

HEALTH SERVICE IN SCHOOLS

Health Examinations

THE SUMMER ROUND-UP

This movement was inaugurated in 1925 by the National Congress of Parents and Teachers, and has as its objective the sending to school of children free from remediable health defects and ready to be taught. It provides for the examination in the early spring of all the pre-school children about to enter school the following fall, notifying the parents as to the defects discovered, follow-up work to secure correction of the defects, and a second examination in the early fall to check corrections.

Now that the summer round-up has proven its usefulness, it should be taken over by the school authorities.

PERIODIC HEALTH EXAMINATIONS

It is strongly recommended that each school pupil should have an annual health examination. When this is not possible, the best approximation to it should be made by a screening process in which classroom teachers or the school nurse would select those pupils most obviously possessing physical defects for further examination. The health examination should be made by the family physician or the school physician. The parent should be present if possible, and the examination should be made with clothing removed, if conditions permit. Fifteen to twenty minutes should be allowed. The examination should create a confidence in all concerned which will: (1) dispatch the child with defects to his physician or to a clinic for a more complete examination and treatment if required; and (2) create in those not requiring further reference at the time, a favorable attitude towards a periodic examination. Certain parts of the examination, however, can be satisfactorily made by the school nurse and teachers.

The teeth should be examined by a dentist, or where circumstances do not permit, by a dental hygienist, physician, nurse, or teacher. The psychology of preparing children for examinations, particularly the dental examination, is important and requires further study.

The health examination should include a case history of disease, certain anthropometric measurements, an examination of eyes, ears, mouth, nose and throat, glands, chest, heart and lungs, abdomen, back, extremities, nervous condition, skin, growth and nutritional status and general condition, and the results of certain mental tests and questionnaires to be answered by the pupil.

The results of the examination should be placed on a permanent cumulative record card.

WEIGHING

The weight of each pupil should be recorded monthly. Weight is no longer considered as a satisfactory measure of nutrition, nor as a scientifically dependable index of health, and monthly weighings should be considered primarily as a measure of growth and development. It is essential that each healthy child gain in weight, not uniformly, but in a progressive and satisfactory manner.

DAILY HEALTH INSPECTION

There should be daily health inspection of all pupils in order to prevent and control communicable disease. This daily health inspection should be made by the classroom teacher, who should be trained to recognize signs of health disturbance which in some cases may be early and premonitory symptoms of contagious disease. Pupils showing such signs should be referred to the nurse or school physician and upon his or her advice should be excluded from school. If there is no nurse or physician, the responsibility of exclusion rests with the principal. In one-room rural schools this person must, of necessity, be the teacher. Any pupil should be excluded from school who is not well enough to attend school that day, or who may endanger the health of other school children. The admission after exclusion should be only upon the advice of a physician. Exclusion of pupils with communicable diseases should be in full cooperation with the public health authorities.

Success in prevention and control of communicable diseases in schools must depend upon parents who have been educated to note important signs in the child at home as a basis for exclusion from school, and who cooperate intelligently and willingly with the family physician and with school and health authorities.

IMMUNIZATION

This is primarily a pre-school problem. The most desirable time for immunization against smallpox is before six months of age, as soon as the infant's nutritional status is well established. Vaccination against diphtheria is advisable after six months of age. Immunization against both of these diseases is the responsibility of the parent, but should be required by Board of Health and school regulation. Entrance to junior high school is the time for re-vaccination against smallpox. The school should promote immunization by education.

Follow-Up Work

The function of the school medical service is not to make diagnosis nor to give treatment, but to assist the school in its work of education and to refer to parents and family physician children with remediable defects. In this connection the cooperative help of the school nurse and visiting teacher in influencing the parents

to have the remedial work promptly attended to is extremely important.

Facts gathered indicate a surprising number of physical defects in school children. The following table, found in the annual report of the Medical Inspection Bureau of the New York State Education Department, shows the number of defects found in the school children of one State.

TOTAL NUMBER AND PERCENTAGE OF PUPILS REPORTED IN NEW YORK STATE, 1928–29, WITH DEFECTS OF

	Cities		Rural	
	No.	Per Cent	No.	Per Cent
Nutrition	25,705	12.3	22,619	6.7
Teeth	82,917	36.2	219,459	38.6
Nose	5,648	2.4	16,349	4.8
Tonsils	30,606	13.3	77,181	23.0
Lymph Glands	3,856	1.6	21,765	11.5
Goiter	3,139	1.3	9,211	2.7
Eyes	18,491	8.0	31,834	9.4
Ears	3,672	1.6	5,941	1.7
Heart	2,667	1.1	5,298	1.5
Lungs	1,489	0.6	2,051	0.6
Hernia	335	0.1	526	0.1
Orthopedic	8,288	3.6	5,698	1.7
Skin and Scalp	10,323	4.5	7,574	2.2
Nervous System	1,010	0.4	2,288	0.6
Mental Deficiency	2,695	1.1	1,976	0.5
Speech	2,576	1.1	2,349	0.7

A higher standard of thoroughness and accuracy in the examinations would reveal an even larger number of defects. It is primarily the responsibility of the parents to have defects corrected. It is primarily the duty of the school to encourage and urge the parent to do this, and to introduce the parent to the community agencies organized for this purpose if there is no family physician. Where there are no clinical facilities available it may be appropriate and desirable for the school to make emergency and temporary provisions for treatment until the community provides such facilities rather than to allow the health of the children to suffer.

In general, the extent of curative or remedial treatment in the schools should be determined in accordance with the criterion that all health work should be educational in character. Such treatment can be justified only if it offers significant educational possibilities. If the educational phase of the work is relatively slight, there is no justification for including it within the school health program.

Nursing Service

The school nurse's program is a part of the school health program and contributes to the general objectives. It must be an integral part of the school program; but it must also coordinate with the general health program of the community. The school nurse should be considered one of the contributors to the health education of both the school and the community. Her functions are determined by the objectives of the school program, the personnel of the health service, the preparation of teachers in health, the needs of the school and the community, and the qualifications of the nurse. The qualified school nurse is one who understands the underlying principles and practices of public health nursing and who has had experience in applying these principles to school situations.

Dental Service

The need of dental care for children of school age is almost universal. While it is essentially the responsibility of parents to have these defects corrected it is the function of the school, through the school health service, to reveal the dental defects and needs of the children, to encourage to the utmost the correction of all of the remediable dental defects, and to carry on a program of education in the care of the teeth as a part of its general program of health education. Probably the most effective time for presenting facts and motives for improved mouth hygiene to the child is when he is in the dental chair having prophylactic or remedial treatment. Many schools maintain dental clinics, not for correcting defects, but for the primary purpose of educating the child in mouth hygiene.

The School Lunch

The school lunch should operate as an integral part of the school health program. It may function as a nutritional measure in at least two ways: (1) by providing an actual meal for the children;

(2) by offering a means for educating children to choose foods suitable for lunch.

The school should feel obligated to provide a lunch at school (1) whenever the distance is too great for the children to go home at noon, or (2) when they would not receive a suitable meal if they went home.

Certain general policies should govern the organization of the school lunch:

1. The control of the school lunch should be entirely in the hands of the school authorities. It should be organized on a non-profit basis. It should ordinarily be expected to pay for the cost of the food and its preparation, and serving, but should not be used to raise money for general expenses of the school. The lunch can thus be provided at a relatively low cost, within the reach of practically all children. Indigent pupils should be given opportunity to render service in return for their lunch, or be otherwise provided for by the school. Sufficient help should be employed so that the home economics teacher and her students should not be exploited in the preparation and serving of the lunch.

2. The lunch room should be an accessible and comfortable place in which to eat. Ample space should be provided to serve without crowding or undue confusion. Similar provision should be made for children who bring box lunches (either in the same or another room).
   The school program should be so arranged that children may eat lunch at a suitable hour and have sufficient time to do it in a leisurely fashion.

3. The children should be required to eat their noon meal at home, at school, or in some place where it is certain that they will have an adequate lunch of clean, wholesome food.

SUPERVISION AND ADMINISTRATION

Two types of supervision are needed in the school lunch room: (1) administrative and (2) educational. These may be represented by the same or different persons. The administrative manager must be trained in institutional management with a knowledge of marketing, food preparation, accounting, and organization. The educational supervisor should have the training outlined elsewhere under nutrition supervisor.

1. The school lunch should aim to provide at least one-third of the daily food requirement of every pupil and it should be served at a minimum cost, the actual amount to be gauged

by the economic status of the community. The foods should be well-cooked and attractively served.

2. The lunch provided may be merely a hot dish to supplement the box lunch, a plate lunch, or a cafeteria choice. Children of the first two or three grades, at least, should be served a plate lunch or be given choices between two foods of equal food value.
3. If the children have a choice of foods, their selection should be supervised to the extent of assuring a reasonably good lunch to each child. The children should be taught in their health education lessons how to select an adequate lunch, and this education should be reinforced by the supervisor and the teachers in the lunch room. Devices which have been successful are: sending daily menus to classrooms; placing a "good lunch" card on each tray or box which meets the standard suggested; suggesting to each pupil as he passes the checker's desk what he needs to make his lunch qualify as a "good lunch"; giving samples of new or unusual foods previous to the time when they are to be served in the lunch room; and finally, arranging the foods on the counter so that the child comes to the essential foods first. This education should be extended to pupils who bring their lunches from home. Written instructions regarding preparation of a well-balanced box luncheon should be prepared and sent to the parents.
4. The sale of candy in the lunch room should be limited. Candy should never be sold to children who have not had a "good lunch" and should never be displayed in ways and quantities beyond the average child's powers of resistance.
5. The above standards and suggestions apply primarily to city schools. Rural schools should adapt and apply these standards and suggestions in so far as the local situation permits.

FIRST AID

The school nurse is the logical individual to apply first aid and emergency care, but only until such time as the child can be referred to the family physician or clinic for further treatment. When a nurse is not available, the teacher should be prepared to render first aid. It is her function to notify parents when necessary and to assist them in securing further treatment.

THE CURRICULUM

Society looks particularly to the school for leadership in the health education of its children. This includes the presentation of knowledge about health, the building up of desirable health habits, and the formation of favorable attitudes and worthy ideals

of health. The goal of health education is daily conduct on the part of the individual which is in accord with our present knowledge of healthful living, in all its aspects—physical, mental, emotional and social.

By guiding pupils in the activities which make up "living as children," the school is laying a foundation for sound future living practices. Health education, therefore, should grow out of and be an integral part of all child experiences in the school, home and community. If such education of the individual is to be continuous, progressive and unified, there must be consistency in the materials and experiences which afford learning to children. Therefore, the same standards of healthful living should be maintained during the 24 hours of the child's day. This means that home, school and community must unite in planning and carrying out health education in any one locality.

While health instruction given in relation to other subjects and activities is increasing and healthful living throughout the school hours is receiving greater recognition as an effective channel of health education, particularly for the children in the lower grades, definite time provision for instruction consistent with its importance should be scheduled and used. Fifty minutes a week up to the fourth grade and 75 minutes a week for the years above the fourth grade should be claimed as a minimum of specific time allotment. In addition, there should be greater flexibility in time schedules which will admit of health instruction being given in relation to appropriate school activities and of the practice of essential health habits in natural situations in school life.

Guiding the child in healthful living should be a major responsibility of every classroom teacher, who should be also responsible for giving children necessary instruction under such administrative organization and supervisory guidance as will insure the integration of health education with all aspects of school life.

Health Instruction

There appears to be general agreement that health instruction should concern itself less with matters of physiological knowledge and more with behaviors relating to personal, community and racial health. Health habits must however be knit into understanding and built into the child so that he sees, feels and understands the "why." All health behavior must gradually be put on

an intelligent basis. Children should be given such knowledge as will make meaningful to them their daily life activities and environment. While ability to understand and use will limit the amount of knowledge given, any partial knowledge should be true as far as it goes and, as ability develops through the elementary school years, knowledge to rationalize habit should be increased in the degree to which children can take and use such knowledge.

Health behavior standards are still in experimental form and, while tentative scales of health behavior have been worked out for various age groups, there is need for further study to indicate at what ages specific types of behavior may reasonably be expected. More attention should also be given to discovering what children at different ages need to know to rationalize behavior. At the present time, the following topics are among those included in the instruction data given in the elementary schools:

Food habits and foods
Sunshine and fresh air
Rest and sleep
Exercise
Posture
Body cleanliness
Elimination
Hygiene of special organs—eyes, ears, etc.
Sanitation and preventive measures
Clothing
Safety and first aid
Mental hygiene
Social hygiene and sex education
Alcohol, tobacco and drugs
Physiology (general) and anatomy

While there is a tendency to increase the number of topics receiving consideration, there appears to be no agreement as to relative importance and the bias of specialists in preparation of material seems largely responsible for the varying emphasis being placed on different topics. Schools should make sure that commercial or voluntary groups with special interests do not influence the development of certain aspects in the curriculum to the exclusion of other important considerations.

In the past decade, there has been a swing away from instruction concerning disease and this has resulted in perhaps too little attention to disease prevention and control. Safety education and social hygiene are not, probably, receiving as much attention as their importance warrants, although they should not be taught as

separate subjects, but should be integrated in the instruction of hygiene. Nutrition teaching also should be given as a part of the health education program in every school grade. There appears to be more or less definite agreement as to the importance of nutrition teaching, although the tendency in practice is to concentrate on food facts to the exclusion of other topics.

Pupils leaving high school should have knowledge of the structure and function of the human body, the biology of reproduction, knowledge and skills which will enable them to cooperate in the reduction of accidents, knowledge and skill in first aid, knowledge of the effects of tobacco, alcohol and other narcotics and patent medicines on the individual human organism and on society, freedom from superstition on subjects concerning health and disease, respect for the scientific method as it applies to health, and a specific knowledge of their own assets and liabilities in bodily equipment.

METHODS OF HEALTH INSTRUCTION

Recent trends in health education place emphasis on health behavior as the main goal of health teaching. Practice, rather than theory, should be emphasized in the training and instruction of children of elementary school age. We learn to live healthfully by living healthfully. It is what children do and not what the teacher says that educates them.

The use of devices for enlisting the interest of the child in health is widespread in the United States today. In terms of method, such devices include the use of competition, reward, entertainment and other such means of arousing interest. Many state groups have developed devices for securing correction of defects and stimulating the practice of health habits. These have taken the form of minimum standards of health achievement for which public recognition is given to individual children. The development of these health standards for children has become one of the outstanding problems in child health and there are many who feel that devices leading towards standardization of children should be given very careful, thoughtful and deliberate consideration before they are adopted. There is cause for grave doubt as to whether many of these devices enlist either a desirable or lasting child interest. The child should be led to find satisfaction in his own activities rather than in inducements provided through point systems, prizes or awards.

In recent years the trend has been away from the use of the text as a lesson book to its use as a reference book for pupils in securing information for solving problems relating to health. An increasingly large number of printed and visual materials on subjects pertaining to health education are available. These include posters, special bulletins, readers, story books, health plays and motion pictures. Health materials are offered to schools from many sources and more adequate educational valuation of these from the viewpoint of total child welfare should be made, before they are accepted and used.

It is important that health education materials suit the interests and stages of intellectual development of the children with whom they are to be used. Statements in such material should be well supported by scientific authority, should avoid dogmatism or exaggeration, should be clear and concise and should not contain part truths.

In the kindergarten it is valuable to have part-time attendance of 2-, 3-, and 4-year-old children in order that the kindergarten may be used as a consultation center for parents of young children. It is recommended that children from under-privileged homes attend the kindergarten from 9:00 A.M. to 3:30 P.M. In such cases it is necessary to have a special program including the best features of the nursery school. Promotion from the kindergarten should be made on the basis of general development and social maturity.

Provision for health and protection of children in the kindergarten may insure the full equivalent in health values of the summer round-up. In addition, the well-conducted kindergarten may establish valuable foundations in mental hygiene and provide opportunities for the development of wholesome social personality.

In the elementary school, health education should be organized chiefly in correlation with other subjects and activities. Instruction in health education should be given whenever the opportunity arises for the practical application of an idea or principle regarding health. All school buildings and equipment and health services should be regarded as important materials of health education, should be evaluated for scientific validity and educational soundness, and children under guidance should learn to use them intelligently. Every teacher in the school should give health instruction, just as every teacher in the school is expected to teach English. Since the fundamental knowledge needed for rationalization of the principles of healthful living lies in the sciences, sound

correlated teaching in both natural and social sciences is of particular importance. In the secondary school health instruction should be given through the established subjects, many of which, such as home economics, civics and biology, offer basic relationships. In addition, it is recommended that a special course in personal, community and racial health be given. The details of this course remain to be worked out.

TESTS

Measurement of health may be divided into the following classifications:

1. Anatomical and physiological measures of health status
2. Paper and pencil tests of health knowledge
3. Paper and pencil tests of health attitudes
4. Observation of health activities
5. Self-checking on health practices
6. Rating of others on health practices

So far as the work in the school is directed toward learning what is acceptable health conduct or toward building up correct attitudes toward health behavior, paper and pencil tests of information and of attitudes are of value. If, however, the ultimate aim of health instruction is to influence the behavior of children toward better health, then one must resort to observation of rating devices at the present time to obtain knowledge as to the success of the instruction. Since there are no standard procedures for measuring health conduct of children, there is great need for the development of some techniques which will be practicable and reliable measures of health conduct.

SAFETY EDUCATION

In any consideration of child health and protection the problem of securing safety from physical danger is of fundamental importance. Society by no means has been unaware of these physical dangers and many agencies have been struggling with the problem. However, much may be done in these preventive and remedial ways, the problem of safety, nevertheless, always will be fundamentally a problem of education. The complete concept of safety should include "safety for" as well as "safety from." Being safe is in reality a substitutional process; certain dangers are to be cut out of life only in order to make room for other adventures and dangers. This two-fold aspect of safety makes it clear that

the good adventure and the intelligent facing of danger therein is as much a part of the safety problem as the avoidance of poor adventure. But to be able to decide what adventures are good and worth having and what adventures are bad and not worth having requires an appreciation of relative values.

Statistics show that approximately 18,000 of the 100,000 deaths by accident in 1929 were children. Figures compiled during the last 7 years, which is about the period during which intensive work in safety education has been carried on in the schools, show that while adult mortality has increased 32 per cent the accident mortality of children has remained stationary in spite of the increase of population. This is the one bright spot in the picture of accident statistics.

In safety education the important problems are: (1) the development of more and better material and better methods for coordinating the work with the other subjects and activities of the curriculum; (2) the adoption of such high grade material and methods by a larger proportion of schools; (3) the development of a satisfactory safety program for secondary schools; and (4) the further development of effective extra-curricular activities with safety values.

SOCIAL HYGIENE

The purpose of social hygiene is so to direct the individual's conduct that his sex endowment, like the other parts of his mental and physical equipment, may contribute richly to self-development and happiness and at the same time conserve the welfare of society. This requires particularly the securing of an informed public opinion, and the instruction of parents, teachers, and leaders of the young concerning these problems. The objectives of the educational program of social hygiene are: (1) to secure an understanding of sex in life necessary for sound personal and social adjustment; (2) to promote wholesome, scientific attitudes towards matters of sex; (3) to establish a high, constructively motivating ideal of marriage and family life; (4) to foster knowledge and practice of personal sex hygiene, including knowledge of the venereal diseases; and (5) to secure acceptance of responsibility for a high standard of sex conduct.

Social hygiene is not proposed as a separate subject in the curriculum but as one phase of health education. It should be developed as an integral part of the whole general education pro-

gram. The facts of life which concern sex should not be taken from their normal setting. The subject matter in the biological and social sciences, hygiene, physical education, home-making, literature and history offer many natural situations for dealing with these fundamental facts. Weaving in and out through existing courses of the curriculum, social hygiene should seek to convince the student that sex in human life, especially in relation to marriage, parenthood, the home, and the family, deserves a dignified place along with other topics of intense human interest. This bringing of sex out of the shadows of secrecy and degradation is one of the great single accomplishments of social hygiene.

To accomplish the objectives of social hygiene education it is essential to distribute instruction not only through existing courses in the school curriculum, but also through instruction of the child in the home from infancy to adult life. The home has the chief responsibility for direct sex education. Since many parents are not capable of giving the child scientific knowledge and interpretation, they should prepare themselves for this important guidance and instruction by attendance at parent study groups or extension courses.

PHYSICAL EDUCATION

Physical Education is the contribution made to the complete education of the child by the fundamental psycho-motor activities. Although, as this definition implies, physical education has contributions other than health to make to the education of the child, it is herein considered only from the standpoint of its health implications.

A minimum of 30 minutes of physical education daily should be allowed in the school program both in elementary and in secondary schools. In a number of progressive school systems throughout the nation this amount of time is being allowed. In general, however, the present situation is not satisfactory. The needs of the school child for big-muscle activity are not being met, and the important place that physical education occupies in the growth and development of the child needs to be interpreted to school administrators, school boards and to the general public.

Adequate outdoor play space should be provided for every school. In addition a well-lighted and well-ventilated gymnasium should be provided for physical education classes when inclement weather prevents outdoor play.

Physical education should offer instruction in play, games, rhythmic activities, self-testing activities, and out-of-school activities, such as hiking, camping, and recreational clubs. The trend is away from formal gymnastics to the more natural activities enumerated above. In so far as possible these activities should be selected according to the individual needs, interests and abilities of the pupil. The physical education period within the school program of the day should be chiefly a period of instruction, and should articulate successfully with the time and opportunity outside of regular school hours for the practice of activities learned in school and for activities and games belonging to a free or pupil controlled program.

Great care should be exercised that no harmful strains are placed on the child. Highly organized, competitive games for the child from 6 to 10 years of age are to be avoided. Tests of endurance such as long distance running, that are likely to overtax the organs of the body or produce such great fatigue that recovery is not made, should be omitted from the physical education program. Formal breathing exercises are unsound scientifically and are not recommended. Activities requiring strength or speed in running should not be included in the physical education program for girls. Games having separate rules for girls and boys should be played by girls according to girls' rules and by boys according to boys' rules. County, state and national championship tournaments as ordinarily conducted are undesirable for both boys and girls.

NUTRITION TEACHING

Nutrition should be given as a part of the health education program in every school grade. This instruction should be given to all children; boys as well as girls, well-nourished as well as mal-nourished. In the grades, especially the lower ones, the instruction in nutrition should be given largely by the classroom teacher as part of the health education program, under supervision of a trained nutritionist. In the upper grades and high school it is desirable that the instruction be given by the nutrition supervisor or other persons with adequate nutrition training.

The subject matter taught should be scientifically sound and suited to the age, intelligence, and interest of the children. The emphasis should be on the positive rather than on the negative aspects.

ADMINISTRATION AND ORGANIZATION OF SCHOOL HEALTH WORK

Functions and Control

Each community must decide the functions of the school authorities in health work. When it is agreed locally that a certain activity is the responsibility of the school authorities, this activity should be under the full control of the Board of Education, and administered exclusively by educational authorities, with the closest cooperation with other health agencies of the community and State.

The division or department that administers the health program may deal only with health service and health education, or this may be joined, for administrative purposes, with physical education or nutrition, or other phases of the school program making conspicuous contributions to the health of the school. The head of the department should be: (1) An able administrator ranking as a director or assistant superintendent with experience in education and preparation as a school administrator; (2) a physician with educational training and experience; or (3) an educator with a Ph.D. degree with a major in health and other related fields.

Organization

The principal, both in elementary and in secondary schools is the responsible administrative officer in relation to the complete health program.

IN ELEMENTARY SCHOOLS

Health education in the elementary schools should be in charge of the elementary grade teacher under the sympathetic guidance of an efficient advisor or supervisor of health education. In some cases supervisors of health education have been appointed. In other places the trend seems to be to continue such supervision with other aspects of the school health work, and the nurse, the nutrition worker, the physical educator, the science supervisor, and the physician have in different places been appointed to this responsibility. In other places it is recognized as a matter of general educational supervision, and the supervisor of elementary education, or an assistant superintendent or deputy superintendent has been charged with the supervision of health education as well as other aspects of classroom teaching. This latter plan seems

to make for better integration in the general educational curriculum. Whoever directs or supervises the program of health education must have special and adequate professional training for this complex task.

IN SECONDARY SCHOOLS

A school health committee is one important means of coordinating all aspects of health education in secondary schools. Some one person should be delegated by the principal to keep in contact with all phases of the health program and to promote it in every way possible. This health counsellor or coordinator should: (1) see that health is given its proper place in the curriculum; (2) study all available data relating to health in the school; (3) plan the most effective use of the school health service; (4) obtain the physician's and nurse's advice relative to health matters in home or school; (5) maintain adequate cumulative records of each pupil's health history; and (6) on the basis of information thus assembled, advise with reference to modification of policies.

Personnel

Physicians, nurses, dentists, dental hygienists and other members of the health service staff in schools, should be chosen, who have a sympathy for, and an understanding of, the educational implications of the school health program. If not already involved in their preliminary training, a course of training in service should be given to equip them with a reasonable amount of the philosophy and procedures of the educational program.

PHYSICIANS

The school physician should be a graduate in medicine, and it is desirable that he have some training in public health. He may be on a part or whole time basis, with a limited tenure. Choice of the school physician should be made in consultation with local medical leaders.

DENTIST AND DENTAL HYGIENISTS

There should be a school dentist if possible, preferably in full time service. Where adequate dental service cannot be employed, or in order to supplement the dental service, a dental hygienist should be employed. There is a need for dental hygienists with

2, 3, or 4 years of training in dental hygiene for school work. There should be one dental hygienist for every 2,000 children, and one dentist and attendant for every 10,000 children.

NURSES

The school nurse should have the qualifications of a graduate nurse, with training and experience in public health nursing. Her tenure should be on a twelve-month basis with one month's vacation. The day's duty should be 7½ to 8 hours for 40 to 44 hours a week. The school nurse should have a rank in the salary schedule equal to that of the teachers, if she has equal education, training, and experience. There should be one nursing supervisor to 8 or 10 staff nurses. There should be one nurse for approximately 2,000 pupils.

OCULISTS

There should be one or more oculists, where possible, on a part-time basis, whose chief concern should be the conservation of sight. The oculist should be conversant with, and have a degree of supervision over, the work of the sight conservation classes.

PSYCHOLOGISTS OR PSYCHOLOGICAL COUNSELORS

There should be a psychologist in charge of psychological testing, the guidance program, including vocational guidance, individual consultation and the study of problem children. One psychologist for every 1,000 to 1,500 pupils in the elementary school and one for every 500 to 600 pupils in the secondary school, preferably to be attached to separate schools rather than to a central office, is recommended. He should have at least two years' graduate training in a school of education. This preparation should be broad and thorough, giving a grounding in psychology, an appreciation of the many fields touching his work, and practical clinical experience.

VSITING TEACHERS

The visiting teacher should have a college degree with specific training in education and in social case work with emphasis on contact with the home. Visiting teachers also need training in making contacts with classroom teachers and school administrators. The visiting teacher should have much of the responsibility ordina-

rily designated to an attendance officer. There should be one visiting teacher for every 500 pupils.

SCHOOL NUTRITIONISTS

The school nutritionist should have a college degree, preferably a master's degree, with certain courses leading to specialization in this field. In smaller schools the duties of the school nutritionist can be taken care of by the home economics teacher. If she is to be in charge of the school lunch room she should be trained in institutional management.

SUPERVISOR OF HEALTH INSTRUCTION

The supervisor in charge of health instruction should hold a master's degree with a major in health education. She should be well trained in the biological sciences and in modern trends in supervision and curriculum building. She should have had at least three years' experience in classroom teaching.

HEALTH COORDINATOR OR COUNSELOR

The health coordinator or counsellor in the high school should be the person best qualified by natural traits, professional training and experience. In one school this may be the teacher of biology, in another the nutrition teacher, in another the school nurse, and in still another the teacher of physical education.

CLASSROOM TEACHERS

Health instruction should be given by the regular classroom teachers in elementary schools. All teachers in high schools should make contributions to health instruction, under the guidance of the health education supervisor, counselor or coordinator, who has had adequate professional training. Teachers now in service without specific training for this teaching should be given in-service training.

TEACHER OF PHYSICAL EDUCATION

The teacher of physical education should be a well-trained full-time staff member. He should have had professional preparation for his work in a college or university with definite training in education. His teaching load should be limited to 30 to 35 hours

a week. In secondary schools women teachers should be in charge of girls' activities, and men teachers in charge of boy's activities. Coaches should be full-time bona fide members of the physical education staff, with the same qualifications as those required for other physical education teachers.

COST

Recent surveys show that the cost of the health program averages from $2.50 to $3.00 per pupil, in cities from 10,000 to 100,000 population. A few cities are spending annually per pupil from $5.00 to $8.00 for their health program. There is a justification for the expectation that, in the future, as the complete contribution of the program of school health work is attained, the amount now spent for health work in the schools will be materially increased. Some educators are predicting that 10 per cent of the educational budget will not be considered excessive when the complete program is attained.

Surveys

During the past 20 years there has been a steadily increasing tendency to survey school systems. However, a study of these surveys indicates that relatively little attention has been given by the surveys to the school health program. The attention given to the health program as shown by surveys seems to center around buildings, health service, and facilities for physical education programs.

Surveys specifically dealing with school health programs have, in practically all cases, been made by independent agencies directly interested in some form of health work. The techniques used have been those of observation and conference rather than a study of records and the use of objective measures.

The surveys indicate that the health problem as a school problem is very definitely not solved and is often almost entirely neglected by school authorities. The whole health aim, when not neglected, is often limited to a view of the physical aspects with a failure to recognize the great importance of the emotional and social aspects of a complete health program. A number of recent school health surveys have recommended the same things that were needed 20 years ago, although some have gone further with recommendations and have made use of available definite standards which have been developed in this field.

School health surveys which have been made have shown very clearly a need for: (1) The formulation of more definite standards for health education programs; (2) the development of better instruments for evaluating the several phases of health education; (3) the education of survey workers in the use of these improved "tools"; and, (4) the establishment of norms which will end in the more accurate interpretation of the survey findings and in the formulation of proposals and recommendations.

Future health surveys should furnish a body of scientific data about the health of school children and the work of school health programs. These data would serve as the basis for a continuous study of health problems and for the constant readjustment of standards and practices which can only be made in the light of such information.

HEALTH NEEDS OF SPECIAL GROUPS OF SCHOOLS

Certain groups of schools report less favorably on their health programs than do city school systems. The outstanding need in these special situations seems to be a keen realization of the educational requirements in these schools and the proper financial support for the program as it is planned.

Rural Schools

Most rural schools suffer from the poverty of their communities, and from isolation. Well-trained teachers are necessary before the health program can be fundamentally improved in rural schools. There is evidence that even where there are adequate health examinations for rural children, there is a lack of follow-up remedial work.

The movement toward consolidated schools in rural communities should lead to better health education programs. In connection with consolidated schools arises the matter of transportation of pupils which brings with it unique health problems.

One device that promises much to rural communities is a traveling service, preferably sponsored by the State Department of Education. The school nurse may be delegated to serve a group of schools in a county or region. Mobile medical, dental, mental hygiene, and other traveling clinics have rendered noteworthy service in rural communities.

There are many community agencies with which rural schools can cooperate in the interests of better health for school children. There is need that the school activities of these various agencies be centralized, preferably under the control of the State Department of Education.

Private Schools

The situation in private schools is generally favorable. These schools report unusually thorough health examinations, excellent physical education programs. It is recommended that greater emphasis be given to health education, now treated only incidentally; that safety education, now almost wholly disregarded, be included in the program; and that the school program be organized on sound mental hygiene principles.

Parochial Schools

Due to the local autonomy that is the rule in 104 dioceses and the 200 religious teaching orders in the United States, and to the different types of financial support, health work in Catholic schools is found in all stages of development and with varied emphasis.

However, the general tendency in parochial schools is to bring the health program in line with the better practices and standards in the field of health education. Due to the organization in these schools, this change will come about more slowly than it would otherwise.

When the health work in schools is under the control of the city or county health board and is paid for by general taxation, the children of the parochial schools should have the same right to this service as the children in public schools.

Negro Schools

To secure adequate provisions for health and protection of children in the Negro schools, it is important and necessary that more money shall be provided from some sources other than the usual public taxes, if the Negro school children are to be given an equal chance for health and happiness with other children in America. Along with the school health program, in fact, largely precedent to it, there must be improved public schools, and as President Eliot once wrote: "vastly increased sums of money for the public schools"; for, "the chief thing to emphasize with regard to the

Negro school child is that he should receive an education"; and, "the process of education is the only practical means to bring about permanent child health improvement."

From reports and information available it appears that more than two-thirds of the counties and most of the smaller urban communities in the Southern States do not have effective (scarcely any at all) health programs for Negro school children. It appears that this apparent neglect is due almost altogether to lack of public funds, for health officials generally throughout the South are not only willing, but anxious to develop and carry out better health measures for all Negroes.

Indian Schools

Indian Schools also report a serious need of improved personnel and greatly increased financial support. Indian Schools are supported by the Federal Government and better education in the Indian Schools, with a reflected improvement in the health program, is dependent upon the vision of our national legislators to see the need and to meet this with adequate appropriations.

The Migrant School Child

The child engaged in migratory labor, or the child of parents engaged in migratory labor, has given rise to a serious problem in child health. Migrant laborers are regarded as denizens, not citizens, of the communities in which they are employed, and usually the state standards in sanitation, water supply, health inspection, housing, working conditions, child labor laws, and education, are not applied to the migrants and their camps. Migrant school children usually lose about 2 months of school. Percentages of retardation increase rapidly until at the age of sixteen years the retardation is often 100 per cent. Some of the effects of migration on the child are, nomadism, economic exploitation, deprivation of the play life, illiteracy, indolence, social maladjustment, fatigue accumulation, infections of skin and scalp, infections from insect bites and malnutrition. To the degree that migrants live, even temporarily, under unsanitary, non-educative, unmoral or anti-social conditions they constitute a retarding, if not a disintegrating, influence on the community and on the nation.

Schools of Porto Rico

Disease, food and poverty are pressing problems in Porto Rico.

Health education and health service are only beginning to be organized in the Porto Rican schools.

A school health program to meet local community needs in Porto Rico cannot be met from the experience and training of any one professional field. Public health, medicine, social service and education are all concerned with the problem.

In the development of a new and adequate program, special training is needed for directors and leaders. The advanced training now available for leadership of school health programs does not take into consideration the peculiar problems of Porto Rico, and fails to meet local needs.

The development of school health programs throughout the insular school system presents a large problem in the solution of which both the Insular Department of Education and the Insular Department of Health are now cooperating. The limitations of the budgets for education and public health in Porto Rico will probably handicap the local development of training facilities. Assistance from qualified agencies in the United States, during the organization and early development of school health programs in Porto Rico, will be necessary in the promotion of effective progress along sound lines.

Schools of Hawaii

A crucial issue in the child health program in Hawaii is the high rate of tuberculosis which, up to the present time, has not been markedly decreased.

Another vital issue is the lack of adequate provision for the health and welfare in the pre-school period. The pre-school child should be safeguarded through the danger period, and sent to the school with the physical vitality and mental health necessary to insure success.

From an organization standpoint, the most vital issue is provision for a Director of Health Education with special training and experience in this field to work with principals and teachers and to supervise the Nutrition, Dental Hygiene, Physical Education and other phases of the health education program, and to cooperate with outside agencies in promoting a comprehensive health program for children of the pre-school and school age.

The next Territorial Legislature will be asked for a Director of Health Education. In the meantime, effort is being made to promote a closer correlation of all agencies both within and without the Department of Public Instruction that have as their objectives better mental and physical conditions for the school child.

Schools of Alaska

For the schools of Alaska it is recommended that larger appropriations be made for the work of the Alaskan Road Commission in order that travel and communication be improved; that pamphlets relative to practical health needs be printed in the Government Printing Office for distribution among the Offices of Education school libraries in Alaska; that liberal appropriations be continued by Congress for the Alaskan Division of the Office of Education in order that more schools, teachers, hospitals, nurses, doctors and dentists may be maintained; and that the work of the Office of Education for the natives of Alaska be given more publicity in order to stimulate greater interest and greater support for its educational projects.

Schools of the Philippines

School health work has become a prominent part of the general health promotion scheme in the Philippine Islands. The climate, the prevalence of tropical infections and infestations and the inadequacy of the native dietary make the health needs of the natives especially important, whether in the way of direct ministry to the defective and diseased, or by education through examples of good sanitation and by the teaching of hygiene and public health.

In 1929 a specialist in health education was appointed to the Department of Education and a department of health education was organized in the University of the Philippines from which the first majors will be graduated in the spring of 1932.

Schools of the Panama Canal Zone

In order to carry out an adequate health program in the schools of the Panama Canal Zone, there is need for an administrative head of this program. In addition, an increased staff for nursing service, medical service and physical education is recommended. Play spaces adjacent to the schools are seriously needed.

TEACHER PREPARATION

Since the responsibility for vital phases of the health work of the school rests primarily upon the classroom teacher, it is important that teachers be selected for their own physical and mental health as well as for their training for their responsibilities in the health program.

Selection of Normal School Students

The normal school should include an adequate and thorough health examination as a prerequisite for entrance, and no teacher should be certified who cannot present a certificate showing that she is free from remediable defects and in sound health. Not only should the teacher be free from remediable defects, but she should have a live, optimistic personality that will spread the contagion of health during the day. The mental health of the teacher is an important consideration. Teachers themselves should be well adjusted. Teachers to be successful mental hygienists, should be imbued with optimism, justice, emotional stability, enthusiasm, a sense of humor, and kindness. Since these qualities are fundamental it is evident that more emphasis must be placed on selecting individuals possessing these traits than on training them when students in normal schools.

Health in the Normal School Curriculum

Every student teacher should have a fundamental course in child development in order to give her a sound understanding of the whole child. This should form the background for other courses giving special technical information and training in health. Greater emphasis should be placed on the fundamental sciences, as their contribution to the field of health is large. A few large units of instruction should be offered in order to avoid a multiplicity of courses with consequent overlapping.

It is important that an integrated health program in the demonstration school be developed in order that the student teacher may observe and have experience in the practical operation of such a program.

Every student teacher should have a summarized review of health education materials and methods as these apply to elementary school children. The course should consider the methods of using the materials in all other related subjects for health

education; how to interpret and use the course of study or check-list in health education; how to use the daily and casual situations and activities of children that motivate direct health instruction; how to employ knowledge and training in psychology and in principles and procedures of teaching, to health instruction. The elementary school teacher should have a knowledge of the mental hygiene of elementary school children, emphasizing particularly the effects of success, failure, and various types of inhibitions and conflicts upon mental health; sources of health materials in books, pamphlets, and bulletins and their use; the way to secure the cooperation of the home in promoting health and the development of health habits and practices. Some observation of health instruction in the training school should be included in the health methods course of the teacher. Teachers should be trained for the detection of gross defects and the signs of health disturbance. By both practicing a good health regime and by a professionalized subject matter or special methods course, the general elementary school teacher should be able to render efficient service in the health teaching of her pupils.

Teachers of biological science, human physiology, chemistry, physics, general science, and home economics should have a unit of method-work in the teaching of the materials related to health in these fields as a part of the special methods work for each of these subjects. Special emphasis should be given to safety education and social hygiene in connection with the training of the secondary school teacher. There is also need for a course in mental hygiene with emphasis on the fundamental methods of childhood adjustment. All secondary school teachers should know the facts of mental conflict, moods, formative attitudes, and disturbing emotions arising out of the enlarging social life, the awakened sex life, and the necessity of decisions about occupational life of adolescent students.

Health Service in Normal Schools

Health service in the normal schools should include a complete health examination, health advice and supervision of students, the correction of remediable health defects, and the maintenance of a healthful regimen of living. Normal schools should devote increasing attention to the adjustment of their student teachers and should endeavor to make their school life well balanced and socially normal.

Organization in Normal Schools

The health program in normal schools should be integrated by the appointment in each school of a director who will have general oversight of all health activities, both those that are designed to help the students as individuals and those that are designed to equip the students to carry out the health program in the schools. This officer may well work in conjunction with a faculty health committee which would include in its membership the staff members whose work is related to the health program—instructors in the biological sciences, deans of men and women, physical education teachers, and the like.

SCHOOL AND HOME COOPERATION

Cooperation between the home and school is vitally important in the health program. The school must know the relative economic status, the food supply, dietary customs or prejudices and, in general, the extent to which the home is able to provide the facilities for the factors in the health program recommended by the school. An important agency in developing a harmonious and understanding relationship between the home and the school is the parent-teacher association. Some schools ask a member of the local parent-teacher association to serve on the school health committee. Probably the most effective means for winning the cooperation of the home is the visiting teacher or school nurse, whose duty it is to meet in intimate conference the parents of children in need of special observation and help.

NEED FOR PARENTAL EDUCATION

There is a need for parental education in all phases of child training. The special need of the school is that the parent shall understand and appreciate what the school is attempting to do for the child. Parents should learn to look to the school for guidance and this interest in the school should be continuous throughout the child's school career. The school, on the other hand, if it is to assume and maintain such responsibility must provide itself with capable, wise, and sympathetic leaders.

Forms of Cooperation

REMEDIAL WORK

Parents are held primarily responsible for the remedial work following the health examination. Parents should be present at the health examination, be given the results of the health examination and if defects are found, be advised and urged to consult the family physician, dentist, or other community services that are available for the correction of defects. It is often necessary for the school nurse or visiting teacher to explain the need for this corrective work to the parents and to urge that it be given immediate attention.

SOCIAL HYGIENE

Social hygiene and sex instruction should be given in the homes and the responsibility belongs primarily to the parents. If teachers and principals are intelligent and wise enough, they may give invaluable guidance and advice to parents in relation to this very important phase of child education. A progressive school will include in its program of adult education instruction for parents in this, as well as other phases of child training.

AFTER-SCHOOL EMPLOYMENT

After-school employment is another problem demanding the attention of the school and home. Many children, junior and senior high school pupils in particular, work either to supplement the family income, or to secure extra pocket money. This work is often detrimental to health and needs supervision and regulation.

VOCATIONAL GUIDANCE

In the field of vocational guidance home cooperation should play a major part.

HOME STUDY

A frequent source of misunderstanding between the home and the school is the matter of home study. Where home study is assigned the school should make very clear to the home its responsibility in the matter.

MENTAL HYGIENE

Personality difficulties of school children often have their roots in the home situation and the school is powerless to affect a change without the cooperation of the home.

COMMUNITY COOPERATION

Many Agencies Furthering the Health Program

Many agencies are at work in the community to safeguard the health of children and to render expert advice and service. It is essential that the school cooperate with these various agencies and in this way affect a more comprehensive health program. Some of these agencies are supported by public taxation such as the police and fire departments, and others are financed by private resources. All, however, are important in the cooperative relationship between the school and the community. The school nurse is the natural bond between the health work of the school and the public health work of the community. As an illustration of the possible scope of cooperation the safety program offers a good example. National and local organizations interested in the conservation of life and property welcome the opportunity of cooperating with the schools in the teaching of safety. The school cannot afford to neglect to secure the support of these agencies. Police departments, fire departments, insurance companies, automobile clubs, local safety councils, and parent-teacher organizations are all willing to offer support in the safety education program.

Summer Vacation Problem

The long summer vacation presents serious health dangers to the school child. As recommended elsewhere in this report, the responsibility for providing a wholesome and constructive vacation, is primarily the duty of the school. Nevertheless, cooperation with community agencies now offering some special contribution to the child's vacation is essential. Complete integration of all summer programs now carried on by either private or public agencies is the ideal toward which to strive.

Special Agencies Cooperating with Rural Schools

In rural communities several agencies are actively engaged in promoting health with which the schools could very well join

forces. Such organizations as the Farm Bureaus, Anti-Tuberculosis Associations, various public health associations, the Red Cross, and child health associations, health sections of women's clubs, and fraternal organizations, life insurance companies, and parent-teacher associations offer opportunity for the rural school to strengthen its health education program.

Education of the Public

What is particularly needed in order to make the health work in schools effective is an enlightened public opinion. Until the citizens of the country are fully aware of the importance of safeguarding the health of its children the schools will be unable to do the most effective work. Educators are everywhere awake to the need for publicity, and school systems have organized effective channels through which the community is kept informed as to the work and needs of the schools. The significance of health in the total program of education demands that it be given increased publicity that it may gain enthusiastic community support.

Support of the Law

It is particularly important that the health work of the schools be kept out of politics and be freed from pressure by private groups or organizations. Nowhere in the educational system is it more important to have honest officials, and conscientious personnel to carry out the regulations regarding health examinations, the inspection of the conditions of sanitation, and the program of health education. Appointments to important posts in the health education department should be on the basis of merit only. The community must have an awakened conscience to maintain an honest program of school health.

LEGISLATION

Laws directly affecting the health of the school child are: (a) Those relating to the size, location and special uses of school sites and playgrounds; (b) those affecting the building equipment and sanitation of schools; (c) those concerning the teaching of health subjects; (d) those concerning the teaching of physical education; and (e) those affecting the health examination and treatment of children. All of these laws are set up to offset the law compelling

the child's school attendance, and indicate, in themselves, that such attendance is both a menace and a means to health.

Laws mentioned under (a) should not only permit but require the provision of adequate room for physical activities during school hours and at other times and insure proper protection in the carrying out of those activities.

Under (b) adequate protection of life should be provided (as in the possibility of fire), adequate conditions for healthful living and maximum working assured, and provision for spaces and equipments in school buildings for health services.

Under (c) we have had for 50 years, in nearly every State, the requirement of instruction in hygiene with special reference to the effects of alcohol and narcotics. These laws have been supplemented by the inclusion of "health teaching" in the requirements of many "physical education" laws.

Physical education laws (d) exist in most States but will doubtless be revised by many of these as well as enacted by others. Five essentials have more commonly been included in such legislation: (1) Mandatory provision for instruction in health and physical education as a part of the regular curriculum; (2) provision for teacher training, especially of the classroom teacher; (3) preparation of state courses of study; (4) a minimum time allotment of 150 minutes per week; (5) employment of a state director. The Committee on Legislation reports that those consulted on the subject are in general agreement as to these basic principles of legislation with the exception of the matter of time allotment, on which subject serious objections were raised by some of the State Directors of Physical Education. For details on this subject see the complete report.

Regarding laws for health work in schools, the following seem advisable:

1. Legislation should not be too specific.
2. The law should be mandatory, providing in enabling acts legal sanction for progressive health programs adopted by local communities.
3. The State Department of Education should be made responsible for carrying out the provisions of the law.
4. The law should provide for state supervision of school health programs.
5. The local board of education should be made responsible for local administration of the law.

PROBLEMS RECOMMENDED FOR FURTHER STUDY

Certain unsolved problems in the field of health as related to the schools indicate the need for further study in the near future. This committee recommends that study and research, where needed, be applied to the following topics:

1. Professional training of teachers, administrative and supervisory personnel in school health work.
2. Professional training of physicians and others who participate in the health service program.
3. The education "in service" of teachers and other participants in the school health program for improved qualifications for this work.
4. The migrant school child.
5. Administrative procedures for health work in schools.
6. Budget provisions for school health work.
7. The summer vacation problem.
8. Mental hygiene.
9. Development of educational talking moving pictures for effective follow-up of the reports of our committee in the White House Conference.

CONCLUSION

In agreement with the best of the advanced ideas in education, we must always remember that the foremost function of the school is to be aware of, and to deal with, the pupil as an individual. Every child's personality must be respected. The health program must be positive, constructive, preventive. In the health program, as in every part of the school program, "the child must be the course of study." It is he who must be studied. Send the whole child to school. Train the child as a whole while in the school. And send the whole child out when leaving school, with the best that education can give him, more adequately equipped to live life abundantly and to serve efficiently. This must be the slogan of the schools today.

Such a program adequately supported by an awakened public conscience and administered by an enthusiastic, trained personnel is the cornerstone of national progress.

D. COMMITTEE ON VOCATIONAL GUIDANCE AND CHILD LABOR

VOCATIONAL guidance and child labor deserve careful consideration in any program for the health and protection of children. Long experience has shown the need for scrutinizing carefully the labor of children and understanding fully the dangers resulting not only to the child from too early employment, but the far-reaching social and economic aspects involved.

The last 20 years have seen a growing interest in problems connected with the transition of the child from school to work. It concerns itself with the preparation of the child for occupational life, his entrance into industry and adjustment to the conditions surrounding him. This interest has resulted in the development of vocational guidance programs in all parts of the country.

Adequate vocational guidance, with its emphasis upon right adjustment of the child both in and out of school, is believed to be an effective instrument in reducing child labor to a minimum. The school vocational counselor, equipped with a knowledge of occupational opportunities and industrial demands, as well as school organization and procedure, is in a strategic position to recommend and help bring about needed changes in curriculum and "subject-matter"; to bring down the content of education to the child's level; to make adjustments for the youth in school that will prevent discouragement and defer final school leaving; to make the transition from school to work a profitable step in education, with as little loss as possible to the individual and to society.

VOCATIONAL GUIDANCE

The vocational guidance movement had its early beginnings about the time of the first White House Conference in 1909. By 1919, when the second Conference was held, it was still more or less theoretical and experimental, though a number of urban communities had actual programs well under way. Today vocational and educational guidance is an accepted part of every educational program, with a lengthening history of well-considered practice and a significant record of influence on the whole educational provision.

Aims and Purposes of Vocational Guidance

Vocational guidance has been defined as "the process of assisting the individual to choose an occupation, prepare for it, enter upon it and progress in it". It is primarily the task of the vocational counselor, or the personnel worker in education and industry, although, as the National Vocational Guidance Association points out, "the teacher, educational administrator, parent, and social, civic, and religious worker, engaged chiefly in other forms of individual service, find themselves involved also in vocational guidance activities".

It is important to differentiate between vocational education and vocational guidance. Vocational education is training for a specific occupation. Vocational guidance, on the other hand, seeks to provide information and assistance preliminary to this training, and usually preliminary also to any choice of a vocation. Vocational guidance cannot be separated from "educational guidance", since it involves decisions in the choice of studies, choice of curriculums, and choice of schools and colleges. Furthermore, vocational guidance is concerned with pupils in the so-called academic courses in high schools or students in "liberal-arts colleges", quite as much as with pupils in the trade and commercial courses to which the label "vocational" is most often applied. (See "The Principles and Practices of Vocational Guidance", by the National Vocational Guidance Association. Cambridge, Mass., Harvard University Graduate School of Education, 1930. 11 pp.)

The Need for Vocational Guidance

The need for guidance in the selection of an occupation has been felt and expressed throughout recorded history. It became acute under modern industrial conditions, with millions of youth at all ages—a preponderating proportion of them in their early teens—leaving school to go into any one of several thousand occupations, with no conception of the risks or opportunities involved, and without any assistance from those whose interests were identified with youth and society rather than with adult selfishness. School-leaving studies of the first two decades of the twentieth century revealed strikingly the waste involved in the transition from school to work; the futility of an upper elementary and secondary school provision that gave heed chiefly to the small percentage who were going on to college and the professions; the lack

of consideration of individual differences and corresponding individual needs among children and youth. These studies showed unmistakably that society was the loser as the result of too early school leaving. Accordingly the States began raising their compulsory school standards until today the principle of universal schooling up to at least 16 or 18 years is everywhere accepted and almost everywhere in operation; the number of boys and girls in public high schools has grown from one million to five million; educational offerings have been amazingly diversified, and the junior high school and junior college have been established in direct recognition of the varying needs—educational and vocational—resulting from individual differences.

The very extension of high school facilities to a major part of the youth of the United States in the past 20 years has made educational and vocational guidance imperative. Entrance into vocation could not, in view of the vastness of both the educational and the industrial program, continue to be haphazard. "The professions, business, and industry are constantly increasing in technicality, complexity, and specialization," says the National Vocational Guidance Association. "Parents rarely know enough about the separate occupations in this highly organized situation to be able to advise their own children. Organized vocational guidance must be provided to meet the needs of the modern world."

Not only the complicated nature of present-day industrial life, but the modern scientific method itself calls for organized guidance. Vocational guidance is an attempt to apply modern scientific method to entrance into vocation. Every upward extension of the compulsory school age, every successful effort to retain boys and girls in school, every addition to the vocations for which training is provided, intensifies the need for adequate vocational guidance.

ORGANIZING THE EDUCATIONAL PROGRAM FOR GUIDANCE

A modern vocational guidance program would include:

1. Careful study of the individual through mental and other tests, and adequate records.
2. A counseling service, staffed by qualified vocational counselors.
3. A curriculum provision in which vocational and educational guidance is emphasized.

4. Adequate opportunities for vocational training, including try-out courses.
5. Publication and distribution of suitable occupational and educational pamphlets.
6. Placement machinery for obtaining positions and supervising employment for young workers.
7. Scholarships and similar aids for retaining boys and girls in school.
8. Cooperation with other agencies in vocational guidance.

Study of the Individual

It is considered axiomatic in vocational guidance that all available data bearing on the individual should be consulted before an attempt is made to give counsel and advice. Records and record-keeping, though often resented, are therefore essential.

For purposes of guidance and placement, the individual should be studied by the triple approach of what he now is, what he has done or has had done to him in the past, and what can be prognosticated for him in the future. Two principles that must be recognized in study of a child for guidance are the necessity of considering him as an individual rather than as part of a group, and the recognition that a child is not a fixed and static entity but a continually changing individual whose development, past and future, is often more significant than his present status.

Psychological tests as an objective measure of mental capacity and educational achievement are one of the most valuable instruments for educational and vocational guidance. Because of their objective and uniform quality, they avoid much of the unreliability inherent in school marks as a measure of a child's ability to accomplish. They serve in the guidance of the individual by helping the counselor to advise a method or a type of training in accordance with his possibilities for eventual accomplishment. For the great rank and file of the pupil population, the use of psychological tests in vocational guidance is concerned with grade placement, type of course recommended, and rate of progress made.

In any sort of guidance or selection program it is necessary to take into account those characteristics of an individual which make up the mythical entity variously termed his personality, character, or temperament. The process, however, of getting an adequate picture of this phase of the child is extremely difficult. The common every-day method of securing an opinion in these matters from persons with whom the child is associated involves a high

degree of unreliability. A nervous, high-strung teacher calls a boy "troublesome" while he is called "high-spirited" by a more placid colleague. Recognition, then, of the fallibility of unchecked judgments, as well as the necessity of finding some satisfactory method of securing a reliable measure of this aspect of the individual, has led to the development of personality rating scales, check lists, word pictures, and other devices. Various scales of this sort have been made use of in the Army, in the Civil Service, and in a number of industrial and educational institutions.

As for record-keeping, some of the more important criteria are that the record form must show trends of development of abilities and interests, must be based on accurate measures and concrete observations, must show a coherent and integrated picture of the individual, and should be fairly complete for the large mass of "normal" children, requiring auxiliary cards only for extremely atypical subjects, mentally or physically.

Counseling

An increasing number of schools throughout the country have been releasing teachers or administrators from some of their other duties, or, as the size of the school permitted, have been appointing full-time members of the staff to carry the duties of counseling.

Counseling may be thought of as an endeavor to help boys and girls make the educational, personal, and social adjustments within the school community that will best prepare them to effect desirable vocational, personal, and social adjustments when they become a more definite part of the larger community.

In the reports received from public school officials, greater emphasis is placed upon individual counseling than upon any other activity in the present vocational guidance program, psychological tests coming next in rank, and group counseling third. Counselors who serve on a part-time basis far outnumber those on full time, however, and there is little or no uniformity in respect to title of position, duties, qualifications, or training. One of the tendencies is the stress placed upon special training for counselors, as indicated by the increasing number of university courses available in this field, standards for licensing counselors set up by several States, and a national committee at work on the problem.

The senior high school as the unit in which counseling is conducted is emphasized by the greatest number of school systems,

with the junior high schools listed almost as frequently. The ninth grade is the place in the school system where the maximum amount of counseling is done, with the eighth next in order of frequency, followed by the seventh, twelfth, and tenth.

The main duties of counselors are in vocational counseling (individual or group or both), in classes in occupations, and in occupational research or securing information for occupational studies.

Of the 109 persons studied who were performing counselor service, 44 were called counselors, 11 teacher-counselors, 9 counselor-teachers, 9 were principals, 9 advisors, 6 "coordinators", 5 deans, 4 assistant principals, 3 visiting counselors, 3 girls' directors, 3 employment workers, 1 vice-principal and counselor, 1 vice-principal and head counselor, and 1 head counselor. Besides vocational counseling, the duties of these 109 counselors included "interviewing failures," educational counseling, placement and follow-up, research, registration, collecting record data, teaching, discipline, teaching occupations, administering and evaluating mental tests, conferences with parents, interviewing entrants, visiting homes, interviewing withdrawals, supervising the teaching program, conferences with teachers, "health guidance", visiting employers, managing scholarships, conference with agencies, and other activities. This information indicates that the counselor's duties need to be defined and standardized.

Two general methods of counseling are in use, that of the group and that of the individual conference, with the present emphasis upon individual counseling. The usual policy in vocational counseling is not to force a plan upon the child but to give him such counsel as he may need—counsel that will assist him in working out his own solution to problems.

Curriculum Work in Educational and Vocational Guidance

About four-fifths of the cities reporting give a one-semester course or more in occupational studies as a regular part of the curriculum. Three-fourths of the cities state that information about occupations is included in courses in other fields, such as civics and English. The following were given as explanatory courses in 46 junior high schools: General shop, woodwork, machine shop, sheet metal, automobile mechanics, mechanical drawing, electricity, printing, typing, shorthand, bookkeeping, elementary business, cooking, sewing, agriculture, music, free-hand drawing. Cities maintaining

an exceptionally good vocational guidance program are likely to carry on a class in educational and occupational information five times a week at the very beginning of the school program, to be followed by another class a year or two years later, also meeting five times a week for a semester, devoted in the main to vocational choice and plans for preparation and entrance upon work.

The once-a-week class in occupations is particularly inadequate —so much so that its difficulties may discredit the work. Continuity is hard to obtain, and it is difficult in this plan to keep up the necessary acquaintance with the pupils, secure efforts outside the class, maintain the friendly relations among the children essential for free discussions, and have adequate time for the appropriate subject matter.

Outcomes that may be expected from successful study of vocational information are: First, an understanding on the part of boys and girls of the responsibilities and opportunities of work; second, an understanding of the larger problems of vocational life—those requiring cooperation for their solution and sometimes government action.

Teachers who desire to get vocational material into the curriculum now have available numerous books, some of them describing the world of occupations, others designed to guide teachers in teaching vocations.

Opportunities for Training

An adequate program of vocational guidance presupposes opportunities for vocational training. In the process of transfer from school to occupational success, preparation for the occupation must take place somewhere along the line. Such preparation may be very limited, requiring only a few minutes of "breaking in", or it may be very extensive, calling for years of study, the difference depending upon the occupation. Vocational education fails to accomplish its real purpose, however, if it is not based upon proper guidance, and if it does not eventuate in satisfactory employment in the vocation for which preparation is provided.

The need for vocational preparation has been greatly emphasized in recent years by the increasing numbers of people to be assimilated in vocational life, by the ever-widening range of occupations to be considered by each individual, and by rapid changes in occupations in practically all fields of work.

Changes in methods of production and distribution in recent

times have greatly affected demands upon the worker's skill and time. The increased mechanization of industrial processes and perfection of machine performance, the more effective coordination of manufacturing processes, and more efficient methods of management which have increased production and at the same time decreased the number of workers, have created problems for industrial workers that have had much attention. But within the past decade similar changes have affected types of work once considered quite immune from the invasion of mechanical invention. The billing machine, tabulator, and bookkeeping machine have brought about an entire reorganization of office occupations. The automatic telephone has displaced thousands of workers and transformed an elaborate system of training in one form of communication, and the automatic telegraph has brought similar changes in another branch of the same industry. The self-serve restaurant has changed food service both for the waitress and the cook, and the self-serve grocery is making like transformations for the persons who sell food-stuffs. Power-driven machines are making changes in farming that have led economists to aver that farming will soon experience division of labor comparable to that whereby industry was revolutionized. The motion picture camera and the talking picture have remade the actor's profession. The radio is being used to give instruction on a large scale and its introduction into the school room already suggests changes in methods of instruction and the teacher's part in the teaching process.

The manner of distributing goods is changing probably more rapidly than the making of things. The automobile has not only created a vast industry employing many thousands of workers, but has changed every form of transportation, Commodities are now conveyed to stores daily and stores once centralized are now being located where people live. The airplane has also introduced a number of occupations scarcely known at all a decade or two ago, and the speed of the air service is making its impress upon business transactions.

Complicated problems have been introduced—meeting the occupational needs of individuals by a program of training suited to all types of young people over fourteen years of age and at every school level; providing the variety of courses needed to enable each individual to find his place in one of a wide range of occupations, many of them changing in less than a single life-time;

and directing the individual's interests in present situations and conserving them for the adaptations to new ones which conditions demand from time to time—these, with their many ramifications, are the problems of vocational education.

Vocational training has been carried on in the home, in the workshop, and in private vocational schools of various types. Public vocational schools represent a relatively new movement in education, a movement largely confined to the past twenty years. The passage by Congress of the Smith-Hughes Vocational Education Act in 1917 gave significant impetus to vocational education throughout the United States, stimulating provision by the States for day, evening, and part-time schools in agriculture, trade and industry, and home economics. Extension of vocational courses under the Smith-Hughes Act indicates public acceptance of vocational education in practically all fields of work.

Occupational Studies

A knowledge of vocations is considered fundamental for workers in vocational guidance. Accordingly, within the past few years a number of school systems have included occupational research as an important feature of their vocational guidance programs, in order that pupils, vocational guidance workers, and school administrators may have for their use occupational studies presenting up-to-date, accurate, and unprejudiced material concerning the vocational opportunities and problems, and the educational needs related to these, within their own community.

The earliest occupational studies were published in 1910 and 1912 and were descriptive in character. Following these, during the next five years, were studies describing the vocational experiences of young people, and community surveys describing the industries and occupations in the community for which vocational education had been planned. Then, during the war period, occupational research stressed detailed studies, or job analyses of occupations, for the use of employment managers. By 1926 a number of public school systems had centralized the study and investigation of industrial and business concerns, and organized this phase of the work so that schedules, reports, and reference files were used in this connection; and a smaller number of these cities had begun to publish the results of their investigations in the form of occupational pamphlets. By 1930 the number of school systems engaging in some form of occupational research had increased,

but only about one-fourth of these published the results of their research.

A very large amount of occupational material has also been made available by organizations not connected with the public school system—other educational agencies, government, social, and business groups.

Placement in the Vocational Guidance Program

Placement of juniors that adheres most closely to vocational guidance standards in this country comes chiefly under three heads: First, that done by public school systems; second, that done by social and philanthropic organizations; and third, what may be called "public employment"—i.e., Federal, State, or municipal—financed by public funds, administered by governmental employees, and available for the most part to a less restricted group than the services under private administration.

Although school systems are by no means agreed that junior placement should be a public education function, most of the larger systems have some kind of organized plan for including it, and about a third of all city school systems furnish and feel responsible for placement assistance to the school population.

In some systems the placement work is organized in a central department headed by a director; in others a decentralized plan is followed, with employment offices in the separate schools, and no effort is made in the system as a whole to coordinate the work or to unify the activities. Most of the school systems studied for this report follow the plan of the central office, where all children are served—referred by their schools, or drifting in after other school connections have been severed. The work-certificate departments of the schools are often responsible for referring the children to the placement bureaus. In cities having a central director there are sometimes branch offices in the several schools (generally high schools and trade schools), which are responsible for their particular school groups. In other cities the school offices are independently organized, and the placement work, instead of being done by special placement workers, as it is often done in the centralized plan, is done almost entirely by teachers assigned on a part-time basis.

The organization of placement within the bureaus themselves is as different as the organization of programs within different communities. Staffs differ in size and in qualifications, and

notably in training. In some instances, bureaus say there are no educational or experience requirements; others require specialized training in psychology, economics or sociology, and case work, in addition to college graduation. Training for workers in the public school departments generally meets the requirements for public school teachers, and in some cases goes beyond it, requiring specialized work in the field of vocational guidance. In the smaller cities, teachers, assigned either full-time or part-time, do the work of placement, but the tendency in the larger cities, especially in those over one hundred thousand population, is to have special workers, on special licenses, with special abilities and training for this work.

The junior placement office properly staffed and equipped includes more than mere "job finding." It places the interests of junior workers above all other interests; the school placement office gives the school contacts with the occupational world which are valuable in curriculum making and in advising young people of the demands of the business world; it helps to eliminate waste by studying the individual and the job before placement; it encourages further training on the job through "follow-up" procedure; it should contribute in no small way toward reducing the employment problems of adult men and women.

Scholarships

Counselors and others in the vocational guidance work frequently find cases of boys or girls whose earnings are needed for the family income and who must therefore leave school, unless aid can be forthcoming. Special funds have been made available for such cases in an increasing number of cities, and a technique of administration has been worked out, usually in connection with some private agency working in close cooperation with the vocational guidance bureau or the superintendent of schools. Careful handling of scholarships is a very essential feature of a community vocational guidance program.

Cooperation Among Guidance Agencies

In most of what has been said in this summary vocational guidance under public educational auspices has been assumed. As a matter of fact, however, some of the most important work in vocational guidance is done by private or semi-private agencies.

Such organizations as the Young Men's Christian Association, the Young Women's Christian Association, Boy Scouts and Girl Scouts, Kiwanis, Altrusa, the Catholic parochial schools, orphanages, and institutions handling difficult or dependent children have concerned themselves in a significant way with vocational guidance.

Special Problems in Vocational Guidance

There are a number of special situations in the field of vocational guidance that do not lend themselves conveniently to treatment under the ordinary heads. Race differences, for example, are real factors that affect guidance and placement. The 350,000 Indians scattered over the United States and varying widely in their relation to the dominant white civilization are dependent upon an adequate guidance program as an essential part of the adjustment of their youth to modern American life. Many Negro leaders, in spite of the remarkable achievements of their race, regard Negro youth as seriously handicapped in the choice of a vocation—they find colored boys and girls discriminated against in all parts of the country to an extent amounting virtually to "vocational boycott." The employment problems of immigrants, and particularly the children of immigrants, have long given concern; and with peoples like those of Porto Rico, part of the United States, yet not in quite the same status as either natives or immigrants, there are special problems, both in the country of origin and in the States to which they go, while in the Southwest, and to a certain extent elsewhere, the Spanish-speaking neighbor complicates the occupational situation.

Again there is the whole rural situation in the United States, only slightly affected in the past by developments in guidance work, but now beginning to receive consideration through special studies of rural guidance and the inauguration of State programs of vocational guidance which take village and rural boys and girls into account.

NEEDS AND RECOMMENDATIONS

The greatest single need in vocational guidance is the extension to boys and girls everywhere of what is known and practiced in a comparatively few fortunate communities. The committee recommends that vocational guidance be established in all school systems and become an integral part of every school organization.

Only in this way will the human and financial losses be reduced that result from failure to assist pupils to make the educational adjustments that will equip them for vocations in harmony with their abilities and interests.

The committee further recommends as follows:

1. Organization of the school system for guidance, placement, and supervision.
2. Provision for more research on and study of the individual.
3. Provision for specially trained vocational counselors in junior and senior high schools.
4. Study of occupations, vocational opportunities, and curricula adapted to occupational needs.
5. Improvement of instruction to fit needs of the individual.
6. Provision for awarding scholarships.
7. Cooperation with non-public organizations.

Organizing the School System for Guidance

In every community the vocational guidance program should be conducted by a bureau or special department responsible to the superintendent of schools.

The vocational counselor in each junior and senior high school should have technical assistance and supervision from a director of vocational guidance.

Provision should be made for the placement, employment, and supervision of juniors.

Placement

Separately organized facilities for junior placement should be set up in public school systems and other public agencies.

The training requirements for placement workers should include at least a high school education, and a college education is desirable, with special training in economics, sociology, and case work.

Communities should be urged to collect information at a central office and the central office should act as a clearing house for employment information in the community.

National organizations should be urged to plan a system of uniform terminology and uniform records.

Special provision should be made for collecting occupational and educational information on local opportunities for use in the schools.

Study of the Individual

Cumulative reports that provide a running record of an individual's progress through school and into industrial life or higher educational institutions should be installed in every school system that attempts a vocational guidance program.

The use of psychological tests as a measure of both mental capacity and educational achievement furnishes one of the most valuable instruments for educational and vocational guidance. Such tests constitute, however, only one factor in the study of the individual.

There is need for further development of objective tests of personality characteristics for use in vocational guidance.

Tests should be given under the leadership of a trained psychologist; the giving of psychological tests by untrained persons without such supervision should be discouraged.

Counseling

Provision should be made for vocational counselors in all junior and senior high schools where educational choices and the giving of vocational information are possible.

The counselors should be specialists in the field, their training to include economics (labor problems), sociology, psychology, vocational guidance, and education.

If not allowed full time for counseling and related guidance activities, the counselor should at least be freed from subject teaching and other duties.

The counselor's functions should include: (a) Individual counseling and individual case study; (b) keeping cumulative records of pupils; (c) study of occupations for first-hand contact with occupational problems; (d) teaching occupational classes or otherwise meeting pupils in groups.

Curriculum and Guidance

Study of general and local occupations, vocational opportunities, and problems of the occupational world, should be carried on in organized classes, for all students in junior and senior high schools, continuation schools, and evening schools. This should constitute an important part of the program of every vocational counselor and teacher of classes in occupations.

In the future more occupational studies should be prepared for young people of junior and senior high school ages, emphasizing the features in content, style, and mechanical make-up that will prove attractive to them.

A more comprehensive plan for coordinating occupational research activities throughout the country should be developed, in order that information of high standard may be made readily available, assistance given to others in the field, and that duplication of effort and cost be reduced.

These classes should be provided for in appropriate years, especially preliminary to choice of curriculum, entrance upon a new school unit, and before decisions in regard to withdrawal from school.

Classes in occupations should be carefully organized with approved textbooks and taught by vocational counselors or specially trained teachers who are given time to keep informed on occupational opportunities and of the best methods of presenting this information.

Opportunities should be availed of to get appropriate occupational information into other school courses, such as civics and English.

Exploratory and try-out courses should be included in all educational programs affecting adolescents.

Opportunities for Training

Communities setting up vocational guidance programs should be certain that opportunities for vocational training are available. Besides specific vocational preparation, the educational program should include the exploratory and try-out courses already mentioned and prevocational training for special types of children.

The vocational training provided should be flexible and should take into account the rapid changes of the past ten years in production, distribution, and transportation.

Whether given in Federally-aided public secondary schools, in private trade schools, in continuation schools, on the cooperative plan, or by whatever means, the vocational training provision should be adapted to the varying needs of individual boys and girls.

Scholarships

Provision should be made in every community for the giving of scholarships to children who through necessity would have to

leave school to go to work as soon as the child labor law permitted.

It is believed that at the present time scholarships can be most effectively administered by a private or semi-public office, working in close connection with the vocational guidance bureau and the local board of education.

Follow-up work should be a definite part of a scholarship program.

Other Vocational Guidance Agencies

The vocational guidance program in a community should involve every effort to cooperate with existing non-public organizations interested in guidance.

In order to further this cooperation, private organizations working in the field of guidance should keep informed of modern developments and modify their program of vocational guidance as need arises.

CHILD LABOR

Child labor means different things at different times in different places. The United States has no child labor problem of the kind that is common in China and India today, or that was common at the beginning of the Industrial Era in England, or that characterized the early stages of textile development in New England, or that followed the opening of mills and factories in the South after the Civil War. The employment of children of 8 and 9 and 10 years of age in factories and mines is no longer a commonplace; molds in glass factories are not now built so near the ground that only a small child can crouch beneath their handles to open and close them for the glass blowers; the little "breaker" boy of 12 or so is no longer the common sight he used to be, with face blackened and fingers bleeding from the slate he picked bit by bit from the cataract of coal that day in and day out roared past him down the coal breaker. Children of 11 and 12 and 13 no longer, as thousands did only 20 years ago, toil in the lint-laden air of the cotton mills 10 hours a day or through the long hours of the night. But thousands of children only slightly older do this and many another taxing and disagreeable and dangerous task, as well as many a task that may not be taxing or disagreeable or dangerous, but that makes it impossible for the children to do any of the things that are believed

to be essential if they are to come to maturity with health and vigor unimpaired.

A program whose objective is the health and protection of children must, therefore, start with a concept of child labor that shall include the work of all those not physically mature, which by reason of its kind or the conditions under which it is done, or by the mere fact of its being, deprives the individual of the opportunity to achieve the best to which his abilities and character entitle him.

Such a program of protection for the young worker has two aspects. One is legal. It must concern itself largely with prohibitions and restrictions and administrative detail. The other is non-legal. It has to do with the fields of education and guidance, of recreation and hygiene and the study of personality and of all those social and economic forces and institutions that affect all children no less than the working child. All these various problems affecting the health and welfare of children have been made the subject of special study, either of the Vocational Guidance Section of the Vocational Guidance and Child Labor Committee or of other committees of the White House Conference. The Child Labor Section of this committee has necessarily, therefore, confined its study largely to the legal aspect of child labor, with only brief and passing reference to the more fundamental problems and the more constructive programs. But it wishes here to urge its belief in the paramount importance of these problems and programs in any consideration of child labor and employed youth, the more so because the great care and solicitude which our age lavishes upon the individual child so often ceases when the child leaves school and goes to work.

Children in Non-Agricultural Occupations

Children are employed by the hundreds and thousands in a great variety of non-agricultural occupations, chiefly in factories, but also in stores, offices, laundries, restaurants, as laborers and semi-skilled operatives in many kinds of manufacturing industries, as salesboys and girls, delivery boys, shipping clerks, bundle, messenger and errand and office boys and girls, newsboys, garage workers, filling station attendants, porters, railroad laborers, telegraph messengers, telephone operators, servants of all kinds, bootblacks and barbers' helpers, and almost every conceivable

other type of employment, including singing and dancing in vaudeville and performing in traveling carnivals. Various as the jobs are, almost all of them have this in common, that they are unskilled, mechanical and monotonous, offering the child little opportunity to acquire either experience or skill likely to be of value to the adult worker. For example, apprenticeship to the skilled trades among children under 16 appears to be practically nonexistent. Most of the children go from their children's jobs into work that requires only greater physical strength or maturity and can be learned at the most in a few weeks' time.

Many children work in badly ventilated, poorly lighted, insanitary places. Many work long hours—50 hours a week or longer in factories, stores, laundries, restaurants, etc. is common for 14- and 15-year-old boys and girls, and hours of work in many kinds of domestic and personal service, generally unregulated, are longer. Many are employed in connection with machinery that offers a high degree of hazard for the immature, and many are in occupations in which dusty or lint-laden air, fumes and poisonous substances create conditions favorable to tuberculosis and to industrial poisoning, to both of which children and young persons are especially susceptible. Some do taxing and exhausting work. The glass industry for example, an old employer of children, still, though much less extensively than of old, employs children under 16 in furnace rooms, exposed to extremes of temperature, glare and injurious dusts and fumes. Although the majority of regularly employed child workers at the present time are 14 and 15 years old, certain kinds of work, such as work in canneries, industrial home work and newspaper selling, employ large numbers of very young children. In canneries young children frequently work exceedingly long hours, generally 10 or more a day, and boys of 16 and 17 sometimes work 80 hours and 90 hours a week; the work is often under extremely uncomfortable conditions and is sometimes dangerous. Newsboys, the majority of whom are under 12 years of age, often sell papers on the streets until nine or ten o'clock at night, or later, and in some cities their conditions of work are demoralizing in the extreme. Other work also in which children are employed, as for example in pool and billiard rooms, and bowling alleys has been found to be dangerous to morals. Many employments connected with the stage and other public exhibitions foster undesirable character and personality traits, even when they are not actually subversive of

moral standards. Perhaps one of the most demoralizing conditions of the work of children is the fact that they are frequently unemployed and subject during their most plastic years to the deteriorating effects of idleness.

Wages, according to the best representative information available, vary for different industries and kinds of work according to the locality, even for the same industry or the same occupational group. Boys usually have higher wages than girls, though girls in the textile industries and possibly also in clerical work earn more than boys. Factory work probably pays somewhat better than other kinds, except in large cities, where commercial work seems to pay best. Office work is the poorest paid for boys, but is relatively well paid for girls. As a rule, children in domestic and personal service receive the lowest wages of all occupational groups. Weekly wages for children under 16 in any kind of work almost invariably average under $15.00 and generally under $10.00.

LEGAL REGULATION

The legal regulation of child labor is entirely by state laws. There has been no Federal regulation since the Federal child labor tax law was declared unconstitutional in 1922.

In addition to direct regulation by the state child labor laws, the employment of children during school hours is indirectly restricted by compulsory school attendance laws.

The child labor laws set up certain standards relating as a rule to age, education and physical condition which a child must meet before he can be employed in a specified list of occupations. They also limit his hours of employment during the first years of his working life, and prohibit him from employment in certain hazardous occupations.

Each State has a child labor law, but the laws vary greatly both in the adequacy of their provisions and in the stringency of their enforcement. They are very uneven in the amount of protection they extend to the child at work, and many employments are not covered. Work in factories and stores is included under most child labor laws. Other work is not so generally regulated. Although 15 States and the District of Columbia apply the minimum age provisions to all gainful employment, and 28 to a more or less comprehensive list of employments, 5 set no minimum age for employment except in factories and certain

dangerous or hazardous occupations, and two, none except for certain dangerous and hazardous occupations. The various kinds of domestic and personal service, agricultural work and factory work in the home are usually unregulated by child labor laws. In some States canneries are exempt from the operation of the child labor law.

In all except two the minimum age for work is 14 or higher, at least during school hours and for some kinds of work, and seven have an age minimum of 15 or 16. Most state laws also prohibit minors under specified ages, usually 16 or 18, but in some cases up to 21, from work in a number of morally or physically hazardous occupations. The educational standard for going to work in one-third of the States is completion of at least the eighth grade, but in more than one-third the laws either set no educational requirement, or fix no definite grade standard. More than half the States require a physical examination as a preliminary to going to work. About three-fourths of them prohibit the employment, for more than eight hours a day, of working children of certain ages in at least one type of employment, generally in both factories and stores, though some permit exemptions. Four have a 44-hour week for children. On the other hand, nine States permit children under 16 to work 9 to 11 hours a day (of which 8 permit 51 to 60 hours a week), and one does not regulate the length of the working day. Almost all prohibit night work between specified hours, at least in factories.

A number of state child labor laws have some provisions applying to young workers up to at least 18 years. These may prohibit the employment of such boys and girls in physically or morally injurious occupations, or regulate their hours of work, or prohibit night work, or require additional compensation for minors of these ages injured while illegally employed. More than half the States have laws relating to continued education for employed minors, and 12 require attendance up to 18 years of age.

Children in Agricultural Occupations

Agriculture in several respects presents the most serious of all child labor problems. It has always involved more child workers than all other occupations together; it includes a large number of the young workers; it employs thousands of children as migratory workers; it presents difficult problems of control.

Much of the work is characterized by long hours, repetitive processes, unsuitable and sometimes hazardous conditions, interference with school attendance and absence of supervision.

KINDS AND CONDITIONS OF WORK

During the last decade studies of child labor in agriculture and educational surveys which show the effect of the use of children for farm work on rural school attendance have been made by various public and private agencies in 37 States. These studies cover work done by children in general farming, on grain farms, in truck gardening, and in the cultivation or harvesting of certain crops—such as cotton, sugar beets, tobacco, onions, berries and small fruits, orchard fruits and hops. On the whole the most extensive use of child labor occurs in "one-crop" communities.

Children are employed in farm work on three different bases: (1) Some work on the home farm which their parents cultivate as owners, renters, tenants, or croppers; (2) some work for wages, i.e., are hired out; and (3) some work with their parents under a contract system. Many of the latter group are migratory workers, who with their families, go out from the towns and cities to work in the field during the agricultural season.

In general, it may be said that the children of owners are in the most favorable position, especially in regard to school attendance; those of tenants on a cash basis come next, and children of tenants on a crop-share basis, those who are hired out, and those in "contract labor" families have the poorest showing.

Earnings in agricultural work vary somewhat with the age of the child, and the type of work he does, and range from as low as fifteen cents to three or four dollars a day. In most branches the earnings are extremely low. Compensation is both on the time and piece basis, the latter being especially prevalent in the harvesting process. Migratory children working with their families are not always paid directly, their earnings being included in the families' earnings.

PHYSICAL CONSIDERATIONS

Undoubtedly many of the farm tasks in which children assist are harmless, provided that they are not carried on by too young children or too continuously. But this is exactly what happens. Very young children are employed; the work is not suited to their

strength; daily and weekly hours are long, usually exceeding 8 hours and often exceeding 10 or 12 hours a day. In certain types of farm work, moreover, there are definite factors that are unhealthful—such as the cramped positions of workers pulling and topping beets, weeding onions, or suckering and worming tobacco, the exposure to the dampness and cold at the end of the beet and the cranberry seasons, the danger involved in the use of knives and the operation of farm machinery. Among migratory workers congested in unsanitary labor camps, conditions are also detrimental to health.

LEGAL REGULATION

Farm work is generally not included in child labor law provisions, although a few States require work permits for such employment and one State—Wisconsin—regulates by special orders the work of children in certain forms of industrialized agriculture. During school hours such employment is nominally regulated by compulsory school attendance requirements, which differ widely among the States.

INTERFERENCE WITH SCHOOL ATTENDANCE

Child employment is an important factor in the poor showing of rural schools with regard to attendance, and an indirect factor in the perpetuation of inadequate rural school facilities. It is significant that the 15 States with the highest percentage of nonattendance are also the 15 States with the highest percentage of children employed in agriculture.

Not only is absence from school on account of farm work very extensive, but often, with legal sanction, the length of the school term and the compulsory attendance period is shorter in rural than in urban communities. In some States there are exemptions in the compulsory attendance law for the express purpose of allowing children to work on the farm, and in general, enforcement of the attendance law in rural communities is lax.

Especially serious is the effect of farm work upon the schooling of migratory children many of whom leave school two or three months before the end of the session and do not re-enter until late in the fall. These children seldom attend school in the community to which they migrate.

Retardation among children absent for farm work is much greater than among other rural children, and is also greater among

city children who migrate during the agricultural season than among other city children.

HAZARDOUS OCCUPATIONS, INDUSTRIAL ACCIDENTS AND WORKMEN'S COMPENSATION FOR INJURED MINORS

Many thousands of boys and girls are injured in industry each year. Exactly how many these are, no one knows, as less than a third of the States regularly compile statistics of injuries to minors. A rough estimate based on information available from 16 States, and believed to understate the actual number, would indicate that in these States at least between 20,000 and 25,000 young persons under 18 and approximately 3,000 under 16 are injured annually, while in 13 of these States reporting, at least 1,100 young persons under 18 are killed or permanently disabled. In addition, harmful dusts and vapors, excessive heat or cold combined with dampness, cramping posture, or over-fatigue, are factors which affect far larger numbers of children than are affected by accidental injury, although their results are not so dramatic.

Prohibition of Hazardous Occupations

Most of the States have attempted through legislation to protect minors of certain ages against injury by prohibiting their employment in certain especially hazardous occupations. Such legislation is far from uniform in the amount of protection it affords and in general is inadequate, as it has been formulated with little reference to modern conditions or to such knowledge of occupational hazards as is available. Provisions relating to hazardous trades often have been copied mechanically from older legislation on the subject, without regard to whether they were adapted to the child-employing industries in the particular State enacting the legislation and without regard to possible changes in industrial conditions. A number of States either provide no special protection of minors from hazardous occupations or have only a general prohibitory clause, either with very few specific prohibitions, or with none.

It is only during recent years that a somewhat more scientific approach to the problem has been made in a few States in which the State department of labor has power to make rulings having the force of law. In these few States the actual accident experi-

ence of minors or the hazards inherent in certain occupations or processes in which they may be engaged have been studied and made the basis of the prohibitions. The power to make rulings, however, is found in the laws of only 25 States, and in only 10 of these has it been used, and as a rule but rarely, to keep young workers out of hazardous occupations and processes.

Little has been done either by law or by rulings to regulate the employment of 16- and 17-year-old minors in hazardous occupations, although high accident rates among them have shown this group to be in special need of protection.

Provisions for Compensation

Legal provisions for the compensation of children and young persons injured in industry are often unsatisfactory. In most of them the amount payable—at best inadequate to indemnify any injured person, adult or minor, for his wage loss—in the case of the injured child is pitifully small, because of his low earnings, of which the amount of compensation is only a percentage. Eighteen States, however, have made special provision to increase the compensation payable to a minor, at least to those who are permanently disabled, by computing his compensation not on the basis of the wage received at the time of injury, but on the amount of the wage he would probably earn on reaching his majority. In 15 States minors are excluded from the benefits of the compensation law if injured while illegally employed. Although this exclusion has been regarded in some quarters as in the best interests of the illegally employed minor, as it may enable him through court procedure to obtain heavier damages than the amount of compensation he would be entitled to under the compensation law, studies made of the actual experience of such minors show that instead of benefiting, the illegally employed minor in these States as a rule fares no better and in many cases worse than if he were under the compensation law. In order to assure the illegally employed minor the benefits of the compensation law, and at the same time give him the advantages at least in part which he would in theory derive from exclusion from this law, 7 States require the payment to a minor injured while illegally employed of the regular compensation plus an additional amount.

ADMINISTRATIVE PROBLEMS WITH REFERENCE TO LAWS AFFECTING CHILD LABOR

While child labor legislation is general, enforcement throughout the country is uneven, and in many places very inadequate, often because the importance of effective enforcement is not realized.

Development of Effective Administration

Sincerity of legislative action demands that whatever child labor standards the State adopts shall be put into effect in such a way that every child within its borders shall receive whatever protection from harmful employment those standards afford. The discovery, adaptation and improvement of methods of putting into effect such standards is a development which in many respects has lagged far behind the realization of the desirability of the standards themselves and their endorsement by law-making bodies. Thus, our early child labor and school attendance laws were often not only weak and unenforceable in themselves (like the Massachusetts law which prohibited the employment of children under 12 for more than 8 hours a day "without their consent"), but usually imposed upon their violation no penalties that could not be avoided by claiming ignorance of the violation, and either were without definite provision for administration or placed administration in the hands of officials unsympathetic toward the purposes of the law and already over-burdened.

Slowly more or less effective systems of administration have developed, slowly not only because of public indifference and a real ignorance of the measures necessary for adequate administration, but also because of opposition to the standards themselves, which when it could not defeat the passage of the law concentrated on preventing its effective enforcement.

The first enforcement machinery provided was in the nature of a police function—a system of inspection to discover employed children not qualified for employment and children working under prohibited conditions. Supplementing this has come the obviously indicated requirement of some sort of proof for the employer and the inspector that the child has fulfilled the legal requirements. At first this was merely the requirement of the parent's affidavit that the child was of legal age, but from this has developed the certificate issued by a public authority and based upon adequate

evidence. With the growth of compulsory school attendance and the consequent public control of the child during certain years, the use of the school attendance machinery has become increasingly important in the effective control of child labor.

Stated briefly, the enforcement system as developed today includes:

1. A system of employment certificate issuance to prevent children from going to work before they have come up to the age, educational and physical standards of the law and to keep track of them after they go to work during the years when their employment is subject to legal regulation.
2. The effective application to all children of compulsory school attendance laws, and the coordination of the machinery of school attendance and child labor law enforcement.
3. Inspection of places of employment.

Issuance of Employment Certificates

The methods employed in the issuance of certificates are of the highest importance. A system which will prevent children not legally authorized from obtaining certificates necessitates the scrutiny of evidence of age, involving the working out of careful standards as to the most reliable kinds of evidence; a careful examination by a physician of the prospective worker, involving the determination of standards of physical fitness; the production of evidence that such educational requirements as the law may set have been fulfilled; and the presentation of evidence that he will be legally employed. If these precautions are not taken official approval may be given to the employment of children not legally qualified, thus placing an impossibly heavy burden upon the inspection department, as in order to be certain that no child is illegally employed the inspector would be obliged to determine the ages and other qualifications of all the children at work in an establishment. Moreover, the special provisions regulating the hours of employment and prohibiting work in hazardous occupations, because of their application to specific age groups, are also dependent upon the certificate system for their proper enforcement, for if the correct ages of the employed minors are not known to the employer, avoidance of violation of these regulations is often impossible. The certificate also provides machinery for supervision by a public agency of the young worker, at least while he is subject to legal regulation, a highly important function

if he is to receive any assistance in the difficult transition from school to work. In order to do this it must be issued to a particular employer and the issuing officer must be notified when the worker becomes unemployed, and he must obtain a new employment certificate when he goes to work for a new employer.

Inspection of places of employment should be sufficiently frequent and thorough to obtain compliance on the part of employers with the legal provisions applying to minor workers—compliance to be voluntary but if necessary to be brought about by prosecutions and the imposition of penalties adequate to deter violations. The methods of inspection should be adapted to this work and appear to be best developed by the use of a special personnel in the state labor department for the enforcement of child labor and closely related laws, as those governing hours of labor of women.

Official personnel qualified by education, experience and training, adequately compensated and appointed under the merit system, should be provided in sufficient numbers for effective certificate issuance, school attendance enforcement, and inspection. Supervision and assistance should be given by state agencies in the development of effective administration of each of these activities.

Minimum Wage

Although the United States Supreme Court has declared unconstitutional the fixing of minimum wage rates for women, the decision does not apply to minors. The establishment of a minimum wage scale for minors is recommended, in order that the industrial exploitation of children and young persons, at least so far as the remuneration for their work is concerned, may be prevented.

Enforcement of School Attendance Laws

The careful enforcement of school attendance of minors of school attendance age up to the age when they may legally go to work, and after that time if they are not actually and legally employed, is basic to child labor law enforcement, since it automatically prevents employment during school hours of under-age children and of children of certificate age who have failed to obtain legal authorization to work, and insures the educational training which the law contemplates as a prerequisite for employment.

Inspection

Insofar as the enforcement of school attendance of minors and effective employment certificate systems do not automatically prevent the illegal employment of minors, inspection of places of employment must be relied upon to accomplish that end. Moreover, such inspection is practically the only method of enforcing regulations applying to children at work. Inspection has an important function also in educating employers both to understand and to obey the law, and in obtaining evidence to be used in the prosecution of employers in cases where such prosecution is deemed necessary.

Workmen's Compensation and Minimum Wage Laws

Consideration should be given to the development of adequate systems of administration of special provisions relating to minors in workmen's compensation and minimum wage laws.

RECOMMENDATIONS

In order that children and young persons may be protected against the dangers of premature employment and employment under adverse conditions, certain economic, social and educational measures are needed as well as adequate legislative restrictions and safeguards.

The committee, therefore, recommends:

1. Directing attention toward the solution of adult unemployment, of farm economics, and toward the solution of adult inadequate incomes, to assure a decent standard of living for children;
2. The extension of State aid to widows and children in the form of mothers' aid laws to enable children to remain in school at least up to the age of 16 years;
3. The development of scholarship funds for children otherwise unable to remain in school;
4. Special educational laws to provide for children in need of vocational guidance;
5. Improvement of legislative standards relating to all kinds of gainful employment of children, and special consideration relative to certain employments such as agriculture, industrial home work, work in canneries, street work, employment outside of school hours, and theatrical work.

Income and Unemployment

Inasmuch as many child workers are from the families of unskilled and other low paid wage earners, or, in the case of children in agriculture, are from farm families among whom the struggle for existence is most acute, and as the incomes of such families are for the most part below the income needed for any reasonable standard of living, child labor is plainly in a large measure a question of poverty. It is urged, therefore, that special attention be directed toward the solution of such problems as adult unemployment, farm economics, and a living wage, since an income earned by the chief wage earner of the family sufficient to maintain a decent standard of living is basic to a normal solution of the problem of child labor as of other problems of child welfare.

Mothers' Aid

The children of widows form a small percentage of child workers. The extension of systems of state aid to widows and dependent children in the form of mothers' aid laws adequately administered and carrying aid sufficient in amount to enable such children to remain in school up to the age of at least 16 years is recommended. Although almost all the States now have mothers' aid laws, the maximum expenditure permitted by the laws of the great majority of them is too small to maintain an adequate standard of living, and the actual grants owing to small appropriations are frequently much less than the maximum amounts allowed by law.

Scholarships

The development of scholarship funds to enable children and young persons to remain in school who would otherwise be obliged to go to work is recommended. Such funds where established are frequently financed by private agencies and administered in cooperation with public school officials, but they might be made a recognized item in the public school budget. (See Report of Vocational Guidance Section of this Committee.)

Special Educational Measures

Numerous studies of working children have shown that causes connected with school have furnished for large proportions of

young workers the chief motive in withdrawal from school to go to work. It is generally admitted that in spite of great and continuing improvements, the type of instruction and the school curriculum provided are not yet sufficiently individualized to meet the abilities and needs of all pupils. Especially is this true in the case of pupils of somewhat inferior mental ability. Most studies have found that children who go to work have on the whole somewhat lower ratings on standard intelligence tests than those who remain in school. Unless special provisions are made for them such dull children are likely to develop habits of failure, lose confidence in themselves and interest in school, and withdraw as soon as possible. Yet these children are often in greater need of supervision and protection during early adolescence than those of better mental development. This committee therefore strongly urges as a child labor measure that some content of education that will mean real development for them be found and provided for children of this type during the years when they are most in need of guidance. (See Report of Vocational Guidance Section of this Committee.)

General Legislative Standards

Under present conditions it is believed to be in the public interest that general legislative standards be set up for all kinds of gainful employment of children, and that special consideration be given the legal regulation of certain employments, such as agriculture, industrial home work, work in canneries, street work, employment outside of school hours and theatrical work. Among special problems created by some of these kinds of work are problems involving interstate relations, as for example the problem of the migrant worker.

The committee recommends the following general standards for all kinds of non-agricultural employment with only such exceptions as are specially noted:

1. An age minimum of 16 years is advocated for employment in any occupation, except as noted below. More and more generally employers are indicating that they do not want child workers under 16, and more and more generally children are remaining in school up to that age. It is the minimum age recommended by physicians who have given special consideration to the subject of physical standards for children going to work, on the ground that employment during

earlier years of adolescence is detrimental to health and normal physical development, the indispensable asset of the industrial worker. Studies of working children also have shown that physical defects are accentuated by the conditions of work and that young workers are more susceptible to disease and industrial poisons and more prone to accident than those of more mature years.

Higher age minima should be set for physically or morally dangerous or injurious employments. This is now done under the child labor laws of many States for specified occupations and industries, the prohibition of a few employments extending up to the age of 21 years.

Where the 16-year minimum for full-time employment is adopted children between 14 and 16 might be permitted to work outside of school hours and during school vacations in a carefully restricted list of occupations.

2. All children should be required to attend school full time for at least nine months, and in any case for the entire period in which the schools are in session, between the age at which compulsory school attendance begins and 16 years of age, unless physically or mentally incapacitated for attendance, and up to the age of 18, unless the minor is actually and legally employed, or is a graduate from a four-year high school course. A 16-year minimum for leaving school for work would seem to make unnecessary a grade requirement, such as completion of the eighth grade, as a child who has not completed the eighth grade at 16 years of age probably is unable and should not be required to do so.

   Particular consideration should be given the subject of public provision of educational opportunities for employed youth, including continuation schools, cooperation with industry in vocational education, etc. (See Report of Vocational Guidance Section of this Committee.)

3. A child should not be allowed to go to work until he has had a physical examination by a public physician and has been found to be in sound health, of normal development for a child of his age and physically fit to be employed in any occupation not prohibited by law.

   There should be periodical physical examinations of all working minors who are under 18 years of age.

4. No minor under 18 years of age should be employed more than 8 hours a day, or more than 6 days a week, or more than 44 hours a week. When the 8-hour day was first established for children, this was shorter than the common working day for adults. Since the 8-hour day is now the standard for large numbers of adults, the question of a shorter working day for minors between 16 and 18 years might well be considered.

Night work (usually defined in child labor laws as between 7 P.M and 6 A.M. or 6 P.M. and 7 A.M.) should be prohibited for minors under 18, except that boys between 16 and 18 might be permitted to work up to 10 P.M. Consideration should be directed to the extension of the night work prohibition for morally hazardous occupations past the age of 18, as is now done under some state child labor laws.

5. Young workers should not be permitted to be employed in places and establishments that do not conform to generally recognized standards as to cleanliness, sanitation, and safety.
6. Employment certificates should be required for all employed minors under 18 years of age.

Administration of Laws

A system of issuance of employment certificates to minors should be developed which will insure that those not legally qualified to enter employment do not do so, but which is sufficiently simple and direct to enable those legally qualified to obtain such authorization without difficulty or delay.

The enforcement of school attendance should be sufficiently effective to keep in school all minors required by law to attend, up to the age when they are legally permitted to work, and after that age until they are actually and legally employed, and should insure the attendance at classes of suitable content of temporarily unemployed minors of compulsory school attendance age. Special attention should be devoted to the problems of school attendance of children in rural districts and of the education of the so-called migratory child workers.

Such clear and definite legal standards should be set up by both child labor and compulsory school attendance laws, without limitations and exemptions, and such correlation between school attendance and employment certificate requirements should be effected to obviate the difficulties now resulting in many States from confused and defective legislation.

Special Problems of Agriculture

Although some regulation of the employment of children in agriculture by the child labor laws is advocated, the most effective approach to its control would seem to be the extension of school attendance requirements for rural children. Special regulations

in regard to schooling and living conditions of migrant agricultural workers, are also necessary.

1. Rural children should be afforded educational opportunities equivalent to those afforded city children. The ages for compulsory attendance and the number of months' attendance required should be uniform throughout the State. Certain minor adaptations of the school term to the needs of farm work may be permitted as a method of improving attendance, but this must not decrease the length of the school term, which in no case should fall below 9 months.

   There should be no distinction in the enforcement of the school attendance law for resident and non-resident or migratory children.
2. No child under 16, resident or non-resident, should be permitted to be employed in agriculture whether at home or away from home, during the hours that the public schools are in session.

   Children under 14 should not be hired out for agricultural work, either independently or as part of a family group employed on a contract basis or otherwise, except that children 12 to 14 years might be employed outside of school hours in light agricultural tasks involving work for only a few hours a day during a short season.

   The hours of work for children under 16 engaged in agricultural work, but not on the home farm, should be limited to an 8-hour day when school is not in session and, when school is in session, to a combined 8-hour day for work and school.

   Special attention should be given the subject of prohibition of employment about dangerous agricultural machinery (see Hazardous Occupations).

   Work permits, valid for the entire season, should be required for children under 16 engaged in agricultural work but not on the home farm.

Special Problems of Hazardous Occupations

In order to insure protection from occupational hazards for young workers it is urged that in every State the agencies responsible for the administration of child labor and workmen's compensation laws develop a program for continuous study of all industrial injuries to minors under 18 years of age. Such a program should include compilation and publication of adequate annual statistics of accidents; investigation of the causes of at least all serious injuries; education of employers in the special

importance of preventing injuries to minors; and education of the public in the importance, as measures of child protection, of suitable legislation dealing with the safety of all workers, of prohibition of the employment of young persons in dangerous occupations, and of compensation for injured minors.

That this program may be as effective as possible from the point of view of the country as a whole, it is recommended that the States compile their statistics of accidents to minors on a comparable basis, and that the Federal Government, through the Children's Bureau of the United States Department of Labor, cooperate with the States by compiling and publishing annual statistics of industrial accidents to minors in the different States, as is now done by the Children's Bureau for other statistics relating to children, such as statistics of employment certificates and of juvenile court cases.

For the further protection of young workers from industrial hazards, it is essential that power be given to state labor departments to determine dangerous and injurious occupations and to prohibit minors' employment therein. Our present body of knowledge of the hazards of the industries and occupations in which minors are employed is so fragmentary and incomplete that a careful and comprehensive study is recommended, both of occupations in which minors are engaged and of those in which industrial hazards occur, and also of possible safeguards in such occupations, in order that a scientific basis for such prohibitions may be found, and that legislative prohibitions may be kept abreast of new industrial hazards.

In view of the wide scope of the problem, affecting minor workers throughout the country, it is recommended that a continuing committee be appointed, of which the members of the Sub-Committee on Hazardous Occupations, Industrial Accidents, and Workmen's Compensation for Injured Minors might form a nucleus, to work in cooperation with the Children's Bureau of the United States Department of Labor and State departments of labor in studying all phases of the problem of protection of minor workers from dangerous and injurious employments.

Minors injured in industry are entitled to more adequate compensation than is now afforded under most state laws. Basic to a state program for the adequate compensation of such injured minors is a workmen's compensation law which is liberal in its general provisions. With reference to provisions relating es-

pecially to minors, it is urged that in all States not yet having such laws that legislation be passed providing:

1. That at least the employee's future earning capacity be considered as the basis on which compensation should be computed in the case of minors permanently disabled.
2. That minors illegally employed when injured should not only be brought under the workmen's compensation law, but that in addition provision should be made for the payment of extra compensation in such cases.

Special Problems of the Migrant Worker

The migrant child worker creates special problems. Attention should be given to the subject of the general welfare of children in labor camps, such as those operated in connection with industrialized agriculture and with canneries. All labor camps should be under the supervision of a state agency, empowered to make and enforce regulations as to sanitation, and so on. Special arrangements should be made under the public school system for provision of school facilities for migrant children and for their attendance when schools are in session. It is recommended that state aid be made available for districts unable to meet the expense involved.

Special Problems of Industrial Home Work

The manufacture of articles in the home should be prohibited. When the home is converted into a workshop not only do young children work under unfavorable conditions but family life also suffers. Prohibition of home work was recommended by the New York Factory Investigating Committee in 1913, and the fact that the New York Commission to Examine Laws Relating to Child Welfare found in 1924 that the only excuse for "not now recommending the immediate complete prohibition of home work in tenements"[1] was the fact that it had "become so deeply intrenched in the industrial life of the State that gradual elimination was all that could be expected" is worthy of consideration by other States in which the problem is not now one of large proportions, but in which the system of industrial home work may be beginning or on the increase.

[1] Manufacturing in Tenements, submitted by Industrial Commissioner to the Commission to Examine the Laws Relating to Child Welfare, New York Department of Labor, p. 7.

Until home work is eliminated, all state labor laws should apply to industrial work of all kinds done in the home equally with that done in the factory. Responsibility for compliance with the laws should be placed upon the manufacturer. A system of licensing of home workers through the state department of labor is recommended.

Special Problems of Street Work

The child labor law should contain a regulation applying specifically to newspaper selling and other undesirable forms of street work, as the general child labor law is not usually successfully applied to street work. The work of newspaper carriers and of other wage-earning street workers should come under the provisions of the child labor law regulating employment outside of school hours of children between 14 and 16.

Special Problems of Employment Outside of School Hours

The employment of children between 14 and 16 outside of school hours in a restricted list of employments should be so limited that the hours in school and at work shall not exceed 8 a day. All other provisions of the child labor law should apply to such employment.

Because employment outside of school hours, especially in street work, is frequently resorted to because of inadequate recreational facilities, it is urged that the public provide recreational and leisure-time activities that will be available for all school children of compulsory school attendance age.

Theatrical Exhibitions and the Like

More information as to the extent, kinds, and conditions of employment in theatrical performances and enlistment of public interest based on a better understanding of the facts are needed, and surveys and studies are recommended.

Uniform legislation would appear to be especially desirable as regards employment in theatrical exhibitions because of the interstate aspect of the employment of children in traveling companies. An exchange of information on traveling children between law-enforcing and other interested agencies would be helpful in protecting the children and developing standards.

EQUALIZATION OF OPPORTUNITY AND PROTECTION

The task of the Child Labor Section of this committee has been to set up certain standards for the health and protection of working children. It has reaffirmed the conviction expressed in the earliest child labor legislation that education and freedom from premature toil go hand in hand and must advance together, and it has given evidence to show that labor in immaturity thwarts normal physical development. It has agreed that children under 16 should not be permitted to leave school for work, and that boys and girls of 16 and 17 in industrial employment should not be suffered to enter occupations known to be physically or morally hazardous, to work more than 8 hours a day or 44 hours a week, or to work at night, and that minors should be given special protection from hazardous and injurious employments. These standards, in the opinion of the committee, represent the least that, in the light of present knowledge and understanding of the mental and physical needs of the child and the adolescent, should be done. They should be looked upon as merely a point of departure for higher goals which it is expected will be revealed through the constantly growing contributions of scientific research.

The committee believes that progress toward such goals would be enormously facilitated by establishing a national minimum standard. The control of child labor with its corollary, the extension of education, is one of the most important of the nation's efforts to realize democracy and as such it is of national importance and concern. For almost a hundred years the States have been regulating child labor. Progress there has been. But this progress has been slow and uneven. Some States still fall far below others in the amount of protection they afford. Grave injustice is seen in these inequalities—injustice to children in States with low standards because they are deprived of equal opportunity with others for health, education and immunity from injurious labor; injustice to employers in States with high standards since they must compete with employers whose labor costs are low because the labor is child labor; injustice to all the citizens in both groups of States, since civic and economic progress is hampered when the young are not equipped to become responsible and productive members of society, and since the mobility of population characteristic of modern times brings many of the ill-equipped from States with low standards to those whose own standards are high.

E. COMMITTEE ON RECREATION AND PHYSICAL EDUCATION

We are concerned with what might be called the Dynamic Health of the Child. Surrounded by all the safeguards of medical care, administration, and health education, the call is for a program of action that will guide the child into the abundant physical life of virility, courage, independence, self-reliance, initiative, the spirit of cooperation, fairness, loyalty, modesty, cheerfulness, chivalry, and good citizenship.

As a result of changing conditions children have been increasingly deprived of the motive, the stimulus, and the opportunity for those types of physical activity which are essential to their fullest development. Such development of the individual depends upon opportunity and stimulus for physical action, play and recreation. Therefore, we study the nature and needs of the child and the youth, to consider ways and means of improving conditions so that we may forward the development of good physique, mental alertness, emotional poise, character, and personality.

This study takes into account these important factors as they relate both to the child and to the adolescent.

Why is it necessary at all to give serious thought to the play life of the child? Should not play be the spontaneous, untrammeled expression of the child's joy of life? Should he not find his own opportunity and devise his own method? Have not children always played without other urge or supervision than nature's promptings?

The answer to these questions is perhaps, "Yes, under natural conditions but, under our changed surroundings, natural impulses are stifled by a lack of opportunity."

Realization of the evil influence of these changing conditions has been gradual and it has been only in the past generation that deep thought and a vast effort have been applied to the organization of the physical education and play-life of the child. Hundreds of millions of treasure have been poured out and many lives of the highest type of intellect and character have been dedicated to the cause. These efforts are the answer of a quickened

civic conscience to a patent need. They are not the product of a fad, fancy, or whim.

The Life of the Child Has Changed

Since the Civil War the United States has consummated its Industrial Revolution. In the middle of the last century only 15 per cent of the population was urban and the cities of that period were nearly rural compared with the metropolitan centers of today. Now more than half of the population lives in cities. A large number of the people work at desks and in factories. Children spend long hours in school and as a result they are not only deprived of the stimulus of useful creative home activities in company with their parents, but are deprived of much necessary big-muscle activity. In two short generations great masses have changed from an open life of big-muscle activity to the indoor life of concentrated little-muscle activity. Free movement in the sunlight and fresh air of the outdoors has become the exception rather than the rule. The growth of industry and the solid residential concentration of city dwellers have made difficult even the finding of play space. The time demand of the educational process and the economic struggle make play time hard to find, while the very nature of the transformation which civilization has been undergoing makes play an even more essential method of contrast and relief in the lives of children and adults.

The Challenge and the Answer

The Industrial Revolution is nothing less than a challenge to the physical integrity of the race. It has brought a sudden transformation of the physical, economic, and social life of the people. By comparison with an economic life where agriculture and the simple methods of production prevail it has made life artificial. It has deprived great numbers of adequate physical activity and development. A scientifically devised program of physical education and organized recreation adapted to the age and capacity of the individual is the answer to this challenge. Such a program would be sound and beneficial in any stage of civilization. In a highly industrialized age it is a prerequisite to national health.

The World War showed us that more than one-third of our drafted men from 21 to 31 years of age were unfit for military

service. Further, 80 per cent of their defects were remediable or preventable. From limited information coming from college physical examinations, we may infer that a national survey of young women would reveal similar statistics. If the men were unfit for war, they are unfit for the higher service and joys of peace.

The fundamental objective of the National Program of Recreation and Physical Education is the physical, mental, and moral well-being of all the people.

What is Being Done?

What is being done? A vast amount. The last quarter of a century has seen a revolutionary orientation to the problem in the field of public and private education. The schools have acknowledged recreation and physical education as an integral element in the educational system. Costly facilities have been provided. Special teachers have been trained. More than 140 universities and colleges have established professional courses to produce qualified teachers of recreation and physical education and in those courses now are more than 10,000 students. Parks and other play spaces have multiplied. A personnel is employed to supervise them. States are establishing parks and the Federal Government is preserving large areas of special beauty for the recreation, inspiration, and refreshment of the citizens. Persons of public spirit have created and financed great organizations to minister to the youth outside the school. And likewise, governmental and private agencies are reaching out to the rural population to bring the advantages of their program to the country as well as to the city.

The reports of its six sub-committees constitute the following full report of the Committee on Recreation and Physical Education:

THE PRE-SCHOOL CHILD

All the evidence we now have discloses that if there be one stage of development more important than another, it is the preschool period, in which mental as well as physical health, motor skills, and social attitudes are established. In consequence, it is necessary to commence education in advance of the school age by beginning the process at birth itself. Parents, therefore, must be instructed so that they may have a larger understanding of

and a wider sympathy for the educational development of the child before he enters school.

The pre-school child has no recreation; his play is his work and his work is his play. This fact renders still more vital the consideration of the employment of his time. The pre-school stage is the period of physical training, in which motor skills are developed, the mind and body coordinated. It is at this period that all the child's occupations have a fundamental effect upon his character as well as his constitution.

Pre-school Recreation Overlooked

It has become evident from our study that these facts are generally overlooked or ignored. While there are striking exceptions, the rule is practically universal that recreation is looked upon as a social activity beginning with school entrance. The kindergarten and the nursery school are gradually pushing this entrance backward, but the nursery school and kindergarten are by no means an integral part of the educational system. The home has not yet been impressed with the importance of the pre-school years since there is little or no direction of play as a part of parent education for that stage of development.

Educational Needs

Since play forms the chief, indeed, the only activity of the pre-school years, it follows that the neglect of the recreation and physical education of the pre-school child constitutes a serious flaw in any system of child care and protection. A child's occupations are his whole existence; he is always at work during his waking hours. "His play is the formative element of the early period, producing independence, self-direction, joy of accomplishment—three basic principles of early life. For this education he needs: a suitable and safe place for his activities; adequate play material; good companionship; sufficient supervision to prevent harm, or accident, yet not enough to take away the oportunity he needs for self-direction and spontaneity." (Baldwin) Absence of motive, stimulus, or opportunity for normal play activity, results in retarded and unsatisfactory physical and mental development.

FINDINGS

With these facts in mind, the sub-committee has made investigations which show:

A marked increase in recent years in the theoretical treatment of the subject; a strong tendency toward the development of play programs in nursery schools, kindergartens, and research centers where opportunity is afforded for observation and study of child nature; a development of play programs by hotels and steamship lines; very little research conducted in the field of recreation and physical education of the pre-school child; the average pre-school child living at home under ordinary circumstances practically ignored as a social unit and left to the wisdom or ignorance of his parents; absence of definite provision for play space; slow development of the backyard or close neighborhood playground; lack of standards of training and experience among certain groups in guiding recreation and physical education of pre-school children; training of leaders here limited; location of playgrounds; home economics touches physical education; kinds of playthings important.

Theoretical Treatment

There has been a marked increase in immediately recent years in the theoretical treatment of this subject. There is a vast amount of information available as to the importance of play, its place in child development, its proper treatment, and an ample supply of good advice as to suitable equipment, apparatus, play space, toys and occupations, roughly grouped consistent with age requirements. Material of this kind has but a limited circulation, having been for the most part prepared in connection with university courses for professional leaders of child study, or for kindergarten and nursery school teachers.

Programs Unrelated to Home

A strong tendency toward the development of play programs in nursery schools, kindergartens, and research centers, where opportunity is afforded for observation and study of child nature. The more modern kindergarten programs are allowing more and more time for "free play" in contrast with the older methods of ceaseless occupation and closely directed games. However, suffi-

cient use is not being made of the kindergarten system as a channel for the education of parents in play direction at home. Much of the recreation in settlements, playgrounds, and other centers, is directed by kindergarten graduates, but the children are benefited only while they are under such supervision; there is little or no "carry over" into the homes. This causes a waste which should be checked.

There has been a development of play programs by hotels and steamship lines, in response to the demand. Whether this is primarily to attract business by offering parents relief from responsibility, or to benefit the children, is open to question.

Little Research Conducted

Very little research is being conducted in the field of recreation and physical education of the pre-school child. What there is, is being well done by certain universities and research centers. Most of the agencies consulted report that this age "is included in the general study." While the high spots in this regard are very "high," it is to be noted that they are also very "spotty."

The average pre-school child, living at home under ordinary circumstances is, in respect to recreation, practically ignored as a social unit and is left to the wisdom or ignorance of his parents.

Pre-school Child Without Play Facilities

Definite provision for play space for the pre-school child is, generally speaking, conspicuous by its absence. Public park systems, municipally controlled, are with increasing frequency setting aside areas for the special use of the small child, and some playgrounds are making such provision. A few isolated examples of special playgrounds for little children, such as the "Tot Lot" of Philadelphia, and the playground in Atlanta, Georgia, have been reported. Sponsors of building projects and land developments are beginning to make such play space a feature of their undertakings, and claim that it is a distinct business advantage to do so.

Wherever it has been actively advocated by such organizations as the Playground and Recreation Association of America, the backyard or close neighborhood playground is developing, but here again it is still a matter of individual, rather than community enlightenment. In this connection also the need for parent education becomes a pressing one.

Lack of Teacher Training Standards

So far as ascertainable, there is no standard or requirement for training or experience in guiding the recreation and physical education of the pre-school child for those persons—of whom there are many—who assemble groups of children under their care either as a means of creating or supplementing their income, or as employees of settlements, day nurseries, and so on. The care given by these persons ranges, uncontrolled, from the highest efficiency in nursery schools, some settlements and playgrounds, to abysmal ignorance and inadequacy in other day nurseries, so-called "Homes" and private institutions. Inspection of these assemblages is usually annual and more or less perfunctory, being, as a rule, concerned chiefly with sanitation, to procure renewal of the license for operation. Requirements for sunshine, fresh air, outdoor play or exercise, rest upon no scientific basis, and are too often ignored.

Training for leadership in guiding pre-school recreation is limited, with rare exceptions, to nursery school and kindergarten teachers. Regular training for recreation and the development of motor skills begins only at the school age level. In a survey of 121 organizations offering training for leadership, only ten made any allusion to the child under six, and replies from further inquiries elicited almost invariably the statement that no special consideration was given to the needs of this age. In playgrounds under supervision the pre-school child is reported as "coming in with the rest" and where possible, a separate area segregates him, as he interferes with the program of the older children. These areas have some equipment, usually the ubiquitous sand pile and slide, but seldom are the children afforded any supervision.

Location of Playgrounds

Experts in the administration of playgrounds were consulted on the following points: Where is it best for a child to play? In a city? In a small town? In a rural district?

Other questions involving where they should play: In a special area set aside on a public playground? A special playground close to home? Own home yard? Or roof playground?

The majority favored, in respect to a playground in a city, either a special playground close to home, or the own home yard; in a small town, either a special area set aside on a public play-

ground or own home yard; and in the country, overwhelmingly, own home yard.

In answer to the question—Who should direct this recreation? —54 favored some one especially trained for the recreation of children under six; the second choice was a kindergartner; and the third, a regularly trained recreation leader. An untrained, paid worker ranks forth, and the volunteer last.

Home Economics and Physical Education

Schools and colleges offering training in home economics give increasing attention to courses on child care, most of which include some definite reference to recreation or physical education. Every state system of education now includes some such training (67 per cent of the colleges and 87 per cent of the public schools) but in very few instances is there specific reference to recreation or activities, except where the course includes actual contact with groups of little children. The Merrill-Palmer Nursery School, Detroit, Michigan, conducts a high school nursery school, to which groups of high school girls are assigned. Each girl spends one day a month for five months in the actual care of children, including their play.

There are 23 colleges which afford students of home economics opportunity for experience with nursery school groups and the list is continually receiving additions. Four colleges report special groups doing laboratory work in a home on the campus. Those colleges reporting nursery schools report also special work with parents, including physical development. There are 15 colleges which report contact with children in home management houses. College extension courses mention physical education, but not definitely as to content. Agricultural extension institutes are beginning to report such training for rural mothers of pre-school children through five-day local institutes.

Kinds of Playthings

Intelligent parents have always, more or less, made use of the commonplace things in the home as play material for the children. Such things as spoons, spools, clothespins, boxes, bottles, and miscellaneous other articles are found among the baby's playthings. That these are of value in the development of manipulative skill is evidenced by their use by experts in experiments and studies of the physical and psychological growth of children.

Aside from these familiar playthings there are numerous toys and play materials which should be familiar to parents as well as to others who are working with little children. The nursery schools are equipped with playthings and apparatus, much of which should be in the homes where there are little children.

In the "Study of Play Materials and Apparatus for the Pre-school Child," an effort has been made to bring together some expert opinions on the meaning of play in child life, to indicate the trend of research in this field, and to show what materials are used in making these studies, to list toys and other play materials which experts think are suitable for young children at advancing age-levels, and to furnish additions to the bibliography in this and related fields.

RECOMMENDATIONS RELATIVE TO PRE-SCHOOL CHILD

From its investigation the Sub-Committee on Recreation and Physical Education for the Pre-school Child finds that interest in the needs and abilities of the child below the age of six years is steadily developing among parents and educators. However, there is not generally available sufficient valid data for their guidance. It also became patent that even those organizations whose program is designed to meet the play needs of children are not all fully aware of the distinctive requirements of pre-school children. Those who recognize the desirability of adequate provision and competent supervision of the play life of these children find a dearth of authoritative information for the teaching, both of the children and of the parents and leaders.

Based upon these facts, the following recommendations are submitted. There is need for:

1. Further research and further study of all facts relative to the scope of this report.
2. Further education of leaders, parents, and teachers.
3. The compilation of authoritative data and of scientifically and pedagogically sound information for those in charge of children on play areas, play materials, play leadership for pre-school children.
4. An increase in well-equipped play areas all the year round for the pre-school children under trained and qualified supervision.
5. The introduction of programs of physical education and recreation in public and private schools.

Study

It is recommended that a study of the needs of pre-school children in relation to physical education and recreation be undertaken and be made far-reaching and comprehensive. It should take into consideration the varied needs of the growing child and his abilities with respect to different age classifications within the pre-school grouping. In addition it should examine the relationship of the health problems, which the equipment of home, school, or playground is designed to meet, to the actual character of the equipment itself. Play materials should be studied with relation to their objectives, in transition from one age level to another.

It is further recommended that colleges, research centers, and universities should be encouraged to continue and to expand their work along these lines and to stimulate students to undertake theses on related subjects.

It is equally desirable that any study undertaken as a result of the White House Conference should include a relevant section devoted to the pre-school children.

Education

It is recommended that those schools, colleges, and universities which offer courses for teachers and leaders in physical education and recreation should include subjects applicable to work with pre-school children.

It is further recommended that these schools and other recognized agencies for the training of leaders in this field should take cognizance of the need of every person supervising pre-school children for authoritative information and instruction, and attempt to supply it. Among the means suggested are:

(a) Itinerant institutes under qualified auspices which shall bring to parents and leaders in urban and rural areas courses of instruction, coupled with demonstrations of standard play equipment for public use, and play material and apparatus designed for homes of varying types; (b) the preparation and distribution of publications on play life, playthings, and related subjects, understandable to an eighth grade reader, written for teachers, leaders, and parents; (c) study groups of parents which shall, in conjunction with the course, be enabled to visit standard centers and play projects and be given experimental training in leadership at

these educational centers; (d) traveling reference libraries, and reference book shelves in public libraries.

Equipment and Play Material

It is recommended that, based on the findings of expert study, data be compiled on play equipment, play material and its objectives for the use of schools, playgrounds, homes, and centers. In addition makers of equipment and playthings should be given full information.

It is desirable that a more uniform standard as to age levels and the respective play materials thereof be established.

Play Areas

It is recommended that special areas for the use of pre-school children be set aside on public playgrounds and be made available all day and all the year round.

It is further recommended that there be adequate and qualified supervision of these areas.

It is recommended that adequate health standards be set up and necessary inspection requisite for their maintenance be generally established.

It is recommended that builders and architects be encouraged to provide play space for children and set aside a section for the pre-school child and his supervisors.

It is recommended that the attention of hotel associations be drawn to the need of the children for whom they provide play space and that they have standard equipment and qualified supervision. This recommendation should apply also to steamships and other agencies concerned with the welfare of the traveling child.

It is recommended that the use of portable playgrounds be encouraged, and that the services of itinerant play leaders be more generally utilized.

It is recommended that a safe method of transportation be provided for children frequenting public and private playgrounds.

It is further recommended that municipalities be encouraged to block off from traffic certain streets at specified times, for the use of children at play.

Vacation Projects

It is recommended that summer camps and vacation play schools which accept mothers and children, or pre-school children without their mothers, have adequate housing and facilities for the child whose activities should be directed by trained leaders.

Migrant Children

It is recommended that children under school age who have to travel, because of the migrant employment of their parents, be given special consideration and that means be adopted to meet their recreational needs.

THE ELEMENTARY SCHOOL CHILD

During the past ten years educational authorities have given considerable attention to the need of making suitable provision for the physical development of school children. Physical education activities are now considered an important part of the regular school work, especially in the primary and intermediate grades. However, the promotion of a successful program of physical education in these grades requires, in addition to a trained teaching personnel, carefully planned indoor and outdoor facilities, and adequate time for each grade.

Physical education is regarded as a part of general education and the same general objectives which apply to the various courses included in the elementary school curriculum also apply to physical education.

Recent Legislation

During the past fifteen years considerable legislation has been enacted in various States throughout the country which relates specifically to the recognition and promotion of physical education as a factor in education. Among these enactments are: Legislation dealing with physical education as a subject in the elementary school curriculum; legislation dealing with the areas of school playgrounds, such as: Areas required for school sites, and maximum areas which may be condemned for school sites; and legislation permitting the use of school playgrounds during after-school hours.

Social Changes Affecting Physical Activity

The program of physical education in elementary schools is passing through a stage of modification and change in order to meet more efficiently the needs of society of today.

Facts disclose that with increased urban congestion there has been a corresponding decrease in opportunity for muscular activity. The invention of labor-saving machinery eliminates physical effort, increases leisure time, and, accompanied by a high-speed civilization living under considerable nervous tension, makes necessary the introduction of systematic play under expert guidance.

Changes have occurred in the prevailing types of activity, in the increasing tendency to use outdoor facilities, in the use of the recess period to include more organized activity, in the use of school playgrounds after school hours, and in the development of pupil leadership and the organization and classification of children.

Teacher Training Inadequate

The teachers of physical education in many states are now included under the standards and requirements of other teachers, although there is considerable variation in this practice. Training for teachers of physical education is being given by nearly all of the state universities and a number of privately owned schools, colleges, and universities. These courses are frequently lacking or inadequate in the matter of giving special attention to the organization and administration of physical education for elementary schools. A large number of state normal schools offer two-year or three-year professional courses for teachers and supervisors of physical education.

There is considerable variation in the amount of time allotted to physical education activities in public schools throughout the country. In general, the amount of time suggested by state departments of education and found in courses of study varies from 30 minutes to 180 minutes per week.

Promotion of Physical Education

It has seemed necessary to promote physical education through various types of publicity, in order that not only the lay person, but also the educator and administrator, may have a better under-

standing of the subject. The state directors are doing especially good publicity work, using news bulletins, articles for journals, public addresses, radio talks, and special conferences.

The promotion of a successful program of physical education in elementary schools requires carefully planned indoor and outdoor facilities in order that all children will have ample opportunity for enjoying these activities. While figures may be obtained in regard to the frequency of playgrounds, play rooms, gymnasia, and swimming pools, and these figures tend to show that a fairly large number of cities provide to some extent for these facilities, as a matter of fact many of the playgrounds and play rooms are very small and lack a sufficient area and varied layout to accommodate the total number of children using them at the same time, not only for carrying on the regular program of physical education but also for the recess and after-school activities.

The organization and administration of a program of physical education in the elementary grades of rural schools is an outstanding need of the present time. On the whole, the rural situation has been considerably neglected during the past few years. However, encouraging progress has been made in a few States.

RECOMMENDATIONS RELATIVE TO THE ELEMENTARY SCHOOL CHILD

In brief summary, the committee recommends:

1. A determination of aims and objectives for a program.
2. Enactment of a general compulsory legislative program adapted to the needs of individual pupils, under responsible administration and teaching staff, and presented according to pupil classification.
3. Provision of adequate equipment and facilities.
4. Curriculum requirements in the first 6 grades.
5. Duties of the teacher.

The first step in establishing a program of physical education should be the determination of aims and objectives. Both the selection of activities and the choice of methods depend upon what is to be accomplished.

Legislation

Legislation is one factor in the promotion of physical education. It should be general rather than specific in its treatment of a

program. Of the general provisions, the law should specify that all grades of the public school adapt physical education according to the needs of the individual pupils; that the program so conducted be recognized as a regular curriculum activity; and that participation with passing credit be required for promotions and graduations.

Program and Administration

The executive of the Board of Education or School Committee, whether known as superintendent of schools, supervising principal, supervisor, or by another title, is the person to whom belongs the responsibility of organizing, administering and integrating physical education.

SIMPLE PROGRAM

To be serviceable, a program must be simple in organization, practical in its recommendations, and sound in the professional principles upon which the content is based. It must be intelligible to every teacher who is to use it. It must be adapted to conditions peculiar to the school or system where it is to be used. Activities must be organized in accordance with facilities, time apportionment, season, the demands of an integrated program, and so on.

TEACHING STAFF

Several different types of teachers are concerned in the conduct of a program of physical education in elementary schools: The teacher (either the regular classroom teacher or a special teacher of physical education) who works with the pupils; the supervisor who has the direction of specific improvement in the educational process; and the director who is in charge of the staff of special teachers and supervisors, and has as well the direction of the program of instruction and after-school activities.

The present trend is definitely toward a larger time apportionment for physical education. The few progressive systems which have the initiative have demonstrated that physical education can be introduced to an extent commensurate with its values without lessening the pupil's advantages in other subjects and activities.

PUPIL CLASSIFICATION

The classification and subsequent organization of pupils is urged as an essential of administrative procedure. It is not limited to

any grade or grades. It is suggested that among the factors to be considered in classifying pupils are: Physical—strength, endurance, skill; health—organic, nutritive and so on; social training needs; mental health needs; and emotional training needs.

FACILITIES AND EQUIPMENT

The facilities and equipment for which the administrator must establish standards of construction, maintenance, and operation are as follows: Playgrounds and athletic fields; gymnasiums; play rooms; swimming pools; accessory rooms—shower rooms, locker and dressing rooms, drying rooms, and so on.

A program of physical education may be limited in its usefulness by the lack of proper facilities and equipment for the activities. It is the duty of the school administration to see that sufficient funds are provided annually, through the proper school budget, to purchase such articles as are necessary to make teaching and pupil practice effective, and to maintain playgrounds and gymnasiums or play rooms commensurate in number and size with the enrollment of the school.

COMPULSORY PHYSICAL EDUCATION

A requirement of physical education for all pupils is essential, since it has a definite contribution to make to every child. The program need not and should not be the same for all. It should fit individual needs, hence it may range from a program of vigorous activity to one of correction for a physical abnormality.

It is possible, at least in a general way, to measure results of physical education. This is possible by having definite objectives for each type of activity and for the year. With these in mind the teacher is able to fashion pupil responses and to supplement with habit formation. For example, the pupils should enjoy their program and they should manifest happiness in their relationship to each other and to the teacher. They should improve steadily in the skills of the games and dances. A better spirit of play and of the qualities of fair play should develop as the pupil advances. Shyness or over-aggressiveness should be less evident. Losing or winning should be accepted cheerfully or modestly.

Suggested Program

The activities listed for a program of physical education in the first six grades are grouped as follows: self-testing activities, including stunts, fundamental skills, apparatus play, achievement tests, and so on; games, including simple games of tag, group games, relay races, and games involving simple team work; rhythmic and dramatic play, including fundamental rhythmic skills, animal imitations, singing games, folk dances, and so on; and outing and related activities. It is essential to adapt these activities to the needs of the individual and the school in order to make the program effective.

While the supervisory and administrative offices should give assistance to the teachers in every possible way, and prepare guides and syllabi for their use, the leadership of the teacher is the most important factor in a successful program of physical education. Without adequate leadership the educational values of physical education are lost.

Problems of the Teacher

The problems of instruction or leadership are those involved: in the organization of opportunities for children to engage in adequately selected activities in a manner best suited to obtain the maximum results from the activity situations; in organizing to insure that every child engages in the activities according to his needs; and in organizing to insure, through the procedures set up, the maximum guidance between a child and his inanimate environment, a child and a child, and a child and the teacher.

The functions of teachers should include the organization of activities, their evaluation, selection, and adaptation; the organization of time and facilities, including the instruction period, the play period, the relief period, the corrective and related activities; the organization of incentives and leadership; and the organization of the children. The technique of teaching involves the ability to determine what forms of guidance should be used in order to achieve the desired results with the particular child. Guidance becomes the process of convincing the child that the modification suggested will lead to a greater satisfaction in the doing of the thing, and will give an ever-increasing thrill of discovery and accomplishment.

Physical education activities offer great opportunities for guid-

ance, because of the abundance of conduct (choice) situations, fundamental interest, deep satisfaction, and an undivided attention which characterizes these activities.

RECREATION AND PHYSICAL EDUCATION IN SECONDARY SCHOOLS

The secondary school, grades seven to twelve inclusive, that is, the junior as well as the senior high school, covers approximately the ages from 12 to 18. These years in a child's life are especially important because of the acceleration in physical and mental growth as well as the great stress and strain that are placed upon the nervous system as the child endeavors to adapt itself to the ever-changing conditions within his body. The most important change of all in this period is the attainment of puberty with its tremendous effects upon body and upon mind. It is an age of ambition, an age of idealism and romance. Interest in the other sex is awakened. Also, since this is the gang age, a boy will be tempted to form good or bad associations. At this period the foundations which the parents and the schools have laid will have their strength tested. It is an age of important character development. Activity should stress the importance of honesty, fair play, courage, perseverance, and so on.

Important Social Changes

The boys and girls of today are living in an age of industrialism and machine labor; urbanization; specialization; and increased leisure.

The youth of today becomes aware of the paradox of a wealthy country with the luxury of automobiles, airplanes, radios, and many labor saving devices which has at the same time national problems of poverty, unemployment, and even the establishment of bread lines in some of our larger cities. Social workers and reform agencies report that there is a general disregard for law and order, a breaking down of morale; that bribery and lack of trust exist in high office, and that the jails are overcrowded. These confusing factors demand an all-inclusive and effective program of education which will fit the boy and the girl to meet life's problems with clear vision and with strong purpose. An all-around program of education must include health and physical education.

Meaning of Health Education

There is much confusion in the minds of educators as to just what health education means. This type of education consists of health service, health instruction, and health activities. Health service includes medical and physical examinations, follow-up work by nurse and social worker, dental examinations and follow-up work, oculist service in the schools, control of communicable diseases and quarantine, proper maintenance of the school plant in respect to light, heat, ventilation and the care of the lavatories. Health instruction includes the work of safety and accident prevention in the lower grades, of anatomy, physiology and hygiene in the junior high school grades, and of community hygiene, first aid and home nursing in the senior high school. Health activities would include all generally agreed upon as constituting physical education, such as: games, athletics, gymnastics, skating, swimming, arts of self-defense, with emphasis upon the sports that will carry over into after life, for example, tennis, golf, bowling, hiking, and so on.

Reasons for Physical Education and Recreation

PHYSICAL DEFECTS

Medical statistics based upon examinations of drafted men in the World War disclose that 30 to 40 per cent were rejected because of physical defects. In consequence, States of the Union vied with each other in passing mandatory or permissive legislation for physical education in our schools. This was done because of the demand for efficiency, preparedness, patriotism and better citizenship.

Statistics resulting from health studies of school children disclose that more than 70 per cent of the school children have physical defects that affect their mental as well as their physical development.

Recent surveys have shown that the rural school children have from one-half to 20 per cent more physical defects than the city school children. The rural child gets a one-sided physical development. He lacks the medical care and health service facilities that the city child is offered.

It is estimated that 30 per cent of all school children are retarded on account of sickness and physical disability.

MORTALITY

Statistics compiled by life insurance companies reveal that although life expectancy has been markedly increased and that infant mortality has been cut down, nevertheless, the death rate has increased in middle life; especially between the years of 45 and 60, when men and women should be rendering their best executive services.

INDUSTRIAL EFFICIENCY AND EXPENSE

Facts on the 30,000,000 of workers in the United States show that they average a loss of 9 working days per year. Much of this loss could be cut down if the workers themselves realized the importance of health regulations and the quarantine which should be established and controlled during epidemics.

The United States spent tens of millions of dollars from public and private funds for the sport and recreational life of its soldiers during the recent World War.

OBJECTIVES

The following specific objectives for a rational program of physical education are submitted:

1. To inculcate health habits;
2. To develop the body harmoniously through systematic exercises;
3. To correct and remedy physical defects;
4. To give a fund of exercise material for use after finishing school;
5. To give opportunities for the development and guidance of play spirit;
6. To provide situations which will arouse and increase the psychical qualities of courage, fair play, self-sacrifice, and loyalty;
7. To give positive instruction in citizenship through leadership and obedience to commands.

RECOMMENDATIONS

1. There should be one period of physical education per day for each pupil in time allotment.
2. There should be guidance based on needs, capacities, and sex.
3. Programs should be outlined to arouse interest, to stimulate a desire for self-improvement, and to provide for a check on the physical and mental effects.

4. Equipment, like laboratory supplies, should be paid for and supplied by the Board of Education or similar purchasing agencies.

Time Allotment

There should be one period of physical education per day for each pupil in the time allotment. It is all nonsense to talk about the value of physical education and health in the school program and then wedge in the physical education period without regard for anything but schedule making. If the educators are really serious in their belief that health comes first and if they are sincere in saying that physical education is important in the life of the child, they should make their schedules around the physical education program. In other words, after they see to it that each child is assigned to the activity classes in play-room, gymnasium or athletic field that will best serve his development, then the rest of the schedule should be completed.

Guidance Based on Needs and Capacities

It is not enough to organize a program of games and athletics and then call it free play and let the children play as they choose. Fundamental game skills should be taught and the achievement goal of artistic performance should ever be kept before the pupils and the teachers. Tests and measurements should be given from time to time to determine progress, for self-satisfaction, to reach achievement goals or to determine whether or not a change to another group would be beneficial. The tests should be made clear to the pupils so that they may respond to teaching directions in order to achieve the best results.

The physical education and recreational program should be based upon individual needs as determined by a thorough medical and physical examination. The examinations should be supplemented by physical capacity tests, tests that will determine the type of work and the extent of pupil participation.

The pupils should be arranged in classes according to their age, grade and their special aptitude.

Sex, age, and stage of development should be considered in the planning and administration of all programs of physical education.

It seems desirable that programs for girls be studied and reorganized to conform to the suggestions made by the sub-committee on Athletics for Girls and to the principles set forth by the

Women's Division of the National Amateur Athletic Federation.

There is need of scientific study and research on the effect upon girls, first, of strenuous competition, and second, of highly competitive games.

Nature of Programs

The program should be outlined so as to arouse interest and enthusiasm and a desire for self-improvement. It should provide for the physical-plus pupil, that is, the one whose body needs particularly strong, vigorous, energetic exercise. A special program should be prepared for the so-called normal child, bearing in mind at all times that each child is an individual and should be treated as such. There should be a special or modified program for children with physical defects or disabilities such as weak hearts, general metabolic deficiencies, and recovery from operations. Sometimes the best type of program for a child is a rest period. The teacher should check up from time to time on the effects that exercise has upon the child's vitality, his scholarship and his interest in school affairs, with a view to changing his program of activities, perhaps, substituting a rest period.

The people of the country are apt to think of outstanding performances of our athletes in the Olympic Games or other championship victories as criteria in themselves of physical well-being in the country and in the nation as a whole. Such is not the case. No program is sound and no school system is thoroughly organized until time is set aside so that every child, the strong and the weak, is given a program suited to his individual needs. Although the essence of competition is to win, nevertheless, the schedules of competition, the length of the periods, should be outlined primarily for the physical well-being and health of the pupil taking part, rather than for the glorification of the high school or the prestige of the community. Athletics should be organized: first, for the pupil, second for the so-called school spirit, and third, for the community interest. The importance of interclass and intramural competition ought to be stressed rather than interschool competition. It is neither wise nor sane to have pupils engage in a schedule that vitiates their school work. Overnight trips should be discouraged and tournaments should be studied from the effect upon the pupils' health rather than from any other consideration. Girls should have interclass and intramural competition.

The Board of Education should supply a well-trained corps

of teachers. These teachers should be recognized members of the faculty. They should have tenure of office and their salaries should be paid in full by the Board of Education.

Equipment

Equipment should be paid for and supplied by the Board of Education in the same way that all laboratory supplies are paid for and provided. Showers, towels, and, swimming pools, when possible, should be provided and maintained by the Board of Education.

Accepted Objectives

Professional objectives adopted by the American Physical Education Association, broad in concept, fundamental in application, are educationally sound. Teachers, perhaps, will want to change, modify, omit some and add others, but at least these professional objectives provide a series of goals to which we may aspire. They include:

A medical examination for every school child; a daily class period for each pupil operating upon scientific curriculum with standardized physical achievement tests; adequate facilities, academic credit, and a teacher fully trained and accredited; the coach ranking as a member of the faculty; an intramural program for after-school hours and programs developed to educate for leisure; development of sportsmanship, ethical conduct, and a correlation with scouting and scoutcraft; equipped and supervised summer playgrounds; and provisions for wholesome adult recreation—to inculcate habits of health that will endure.

It is admitted that physical education is not a panacea nor a cure-all and will neither substitute nor supplant health service and health instruction. However, it will contribute to the child's ethical betterment, make him strong, vigorous, alert, skillful, enthusiastic and cooperative insofar as he is interested and willing to try and is determined to succeed.

RECREATION AND PHYSICAL EDUCATION OUTSIDE THE SCHOOL

Private and semi-public agencies in the field of recreation and physical education are serving about 11,196,735 children from 8 to 18 years of age. Of these 6,300,000 are boys. There are no comparable figures for the numbers served by the 900 and more

cities in the United States which report public recreation. Conservative estimates, however, place this figure in excess of 3,000,000.

Social Organizations

The frequency with which boys and girls make use of the opportunities provided by these agencies varies. During part of the year it may be limited to 4 or 5 hours or even less per week at the meeting of the club or scout troop. During the summer, agencies, through outdoor activities such as camp and playground programs, have boys and girls under their influence for days and weeks at a time, making intensive work of a very valuable sort feasible. The club and settlement activities for many boys and girls in congested parts of cities are in many instances patronized steadily night after night by boys and girls for whom the neighborhood provides little other opportunity for wholesome recreation and training.

Aims

All the agencies aim to satisfy the urges of child life through physical, rhythmic, dramatic, manual, and social activities so that the individual may have a happy personal life and may develop a lasting capacity for wholesome enjoyment. This, however, is but a part of the aim. The agencies have as their goals growth in skills of all kinds, development of good health and sturdy physiques, worthy home membership, safety, training for vocations, the unfolding of personality, moral growth, and good citizenship.

The activities are varied in nature and different in appeal. They range from well-known games to woodcraft, scouting, and natural history; from manual artistry to domesticity; from first aid to dramatics, music, and social diversions. This is only a suggestive summary. For instance, music includes choral work, ukulele clubs, orchestras, and bands of various types. Handcraft includes hundreds of different kinds of articles made of a wide variety of substances. Games alone constitute a list of hundreds of varieties.

Media

In carrying out their programs, these agencies utilize every community resource. Facilities include play rooms and backyards, public playgrounds and parks, boys' club buildings, rented club rooms, church club rooms, parish houses, school kitchens, school

recreation centers, community houses, Y. M. C. A. and Y. W. C. A. buildings, Jewish centers, Knights of Columbus clubs, private and public swimming pools, beaches, camps, parkways, reservations, rivers, canals and lakes, tennis courts, wading pools, settlement houses, basements and roofs, museums, gymnasiums, shelter houses, stadia, and golf courses.

Many agencies own their own buildings but extend their programs out into the community or countryside. Others own no property whatsoever but depend upon cooperation of agencies whom they serve for the use of facilities.

Sources of Support

Public agencies are supported by municipal appropriations. Parks and playgrounds are frequently purchased by the proceeds of bond issues voted by the citizens. Private agencies are supported by campaigns, many of them annual, either by a direct approach to the public or through the medium of the Community Chest. Some groups are in part supported by endowments. Many clubs, settlements, and centers have membership fees which provide, however, only part of the money necessary to conduct the program.

Administration

Private and semi-public agencies are administered by councils, committees, and boards, some of which operate under the auspices of fraternities or churches. In some cases, these local groups are units of the national body. However, in some instances, the relationship of the national body amounts to little more than affiliation. Municipal recreation is administered mainly through park departments, school boards, recreation commissions or departments. In a minority of cities, community recreation is administered by private groups.

Leadership

The majority of both volunteer and employed leaders who come in contact with children served by these agencies are persons of culture, who have had the advantage of college training or its equivalent, and many of them have taken special courses to prepare themselves for their work. They are animated by ideals of service; and, with few exceptions, their personal lives are ones of unquestioned integrity and wholesome influence.

The program of many of these agencies has set a standard for

public and private schools, since their work is based upon close observation of children's interest and needs. More and more their technique is being introduced into the public schools. Another important aspect of their work is their influence in training for the wise use of leisure. Interest and skills are being developed in boys and girls so that whatever they may do or wherever they may be, they will have the inner resources to make a joyous and fruitful use of their leisure time.

The activities of the private and semi-public organizations, it is pointed out by Lee F. Hanmer, "tend to supplement the work of established official agencies and should not in any way be considered as substitutes for them. Public provision for recreation and physical education must be planned without reference to private organizations, as a continuation of the latter depends so much upon voluntary contributions and the willingness of capable individuals to serve as volunteer leaders. Cooperation between such private and public agencies is, however, highly desirable; and it frequently develops that when the value of an activity has been demonstrated it is taken over and incorporated in the program of the official public agency."

Needs

The two major needs are more adequate leadership and more funds. Higher salary standards would in many instances serve to attract persons of greater caliber to this field. On the other hand, improvement in training and better selection of workers will command higher salaries. More funds are needed to secure additional facilities and to extend and improve the field of operation of the agencies.

Although there is little evidence of serious overlapping in the work of agencies, there should be closer cooperation between private agencies operating in the same city, and between public and private groups.

There should be more extensive use of schools and other public buildings for the work of municipal recreation, and for the programs of private agencies in this field.

In some states there should be more legal encouragement of municipal activities.

There is much room for the development of programs in institutions for dependents and defectives. The curative value of games, dramatics, music, and other activities for persons ill in

mind and body has been demonstrated and is a sound basis for their extension in such institutions.

There is a great field for developing physical education and recreation among foreign-born groups in our communities, and among the colored population.

In the rural field, there is need for the expansion of 4-H clubs and other agencies for boys and girls.

To lay a community basis for leisure time activities, it is necessary to train more and more teachers, ministers, 4-H club teachers, members of women's clubs, Parent-Teacher Association leaders, and others so that they may become leaders in their communities and organizations.

There is a large field for research.

Intelligent education of the public as to the importance and objectives of recreation and physical education is a fundamental necessity.

RECOMMENDATIONS

1. Governmental action that would facilitate the work of these agencies as an official recognition of their existence and functions, and additional permissive legislation authorizing the use by them of public buildings and grounds, under such regulations as local authorities find necessary to prescribe.
2. Improvement in leadership will come through better training opportunities and through the establishment of higher standards for recreation workers and teachers of physical education. About 200 educational institutions, and national and local organizations now have training courses in recreation and physical education. These courses should be enriched and extended. Several agencies have courses conducted either separately, directly under their own auspices, or in connection with universities, providing graduate training for college students who plan to go into recreation and physical education. The raising of civil service requirements and stimulating of higher type persons to take civil service examinations will help improve the quality of employed workers. The employment of workers should not only depend upon passing paper examinations but also upon personal interviews and actual testing of capacity for leadership.
3. Closer cooperation between public and private agencies may be secured by local councils, which shall not seek to dominate or coordinate the agencies but may act as clearing houses for the closer cooperation and advancement of the work of all agencies. Agreements and possibly legislative enactments should be worked out so that agencies in a position

to give service may secure the use of buildings and grounds controlled by public bodies or other agencies.

4. There should be Federal and State legislation to permit the employment of specialists to guide and train extension employees and local extension leaders in rural recreation work.
5. There should be an increase of tax funds for public recreation, and encouragement of private gifts to privately supported agencies.
6. There should be further development of park and regional planning.
7. A more aggressive policy among leaders in physical education and recreation in contacting with foreign language groups and communities should be stimulated.
8. There should be greater extension among real estate subdividers of the growing practice of setting aside permanent recreation areas in subdivisions.
9. For the lay groups, information as to standards of recreation facilities and programs for various types and sizes of communities should be made available.
10. As to training the purpose of this report is twofold:

First: To bring together the most accurate information on the present curriculum in the 139 institutions preparing teachers of physical education and leaders in recreation.

Second: To make recommendations to the White House Conference on Child Health and Protection for the improvement of the curriculum preparing teachers for children and adolescents in the pre-school, the elementary and secondary school, and the recreational group after school, including both school and working groups.

The report includes both the education of the group in the essential skills and the recreational repetition of learned skills. From the investigation, it is submitted that:

A. A basal course of 136 semester hours should be divided as follows:

	Huors
1. Natural and Applied Science	37
2. History and Social Science	8
3. Psychology	8
4. Language and Literature	12
5. Education	12
6. Physical Education and Recreation:	
(a) Theory	16
(b) Practice	16
(c) Supervision and Administration	6
(d) Free electives	21
	136

These group requirements were adopted in 1929, by the American Physical Education Association. They were later adopted by the committee of the State Directors for the public schools.

B. Four special elective groups should be built upon the basal course:

1. The health service and health education group
2. The general physical activity group
3. The recreational promotion group
4. The athletic coaching group

Because of transfer of leaders from group to group and to the higher administrative positions, the committee strongly recommends a good basal course for all students preparing for leadership in any of the specific fields. The full report makes clear that such basal courses should allow for adequate electives in the specific field elected through the 21 semester hours of free electives and also through the electives in the 6 general groups.

C. There should be a uniform, clear terminology used. Adoption of the subject terminology given in this report is recommended and likewise the general group given in the first section of these recommendations. These terms and this arrangement have already been adopted by the two national committees above mentioned. Future comparisons of curriculum can be made only as a uniform, clear terminology is used. At present Physical Education, for example, may mean physical practice, hygiene, physiology, administration, or several other topics.

D. The committee recommends that summer schools restrict themselves to continuation instruction or work which is an integral part of a regular professional course rather than furnishing instruction for beginners.

E. The committee recommends that this present study be extended beyond the judgments of experts to include an actual study of the library, laboratory, and physical equipment with the educational leadership furnished.

F. The following sub-committee recommendations are submitted:

1. The pre-school child committee recommends special preparation for teaching this group—in kindergartens, nursery schools, playgrounds, hotels, and on steamers. A special list of institutions doing this work is included in the report.
2. The elementary school committee recommends specialization on the basis of the 4-year curriculum adopted by the General

Committee for three groups of teachers: (a) Regular 4-year curriculum for teachers of physical education; (b) 2-year curriculum for training of elementary classroom teachers; (c) 4-year curriculum for training of elementary classroom teachers.

3. The secondary school committee recommends adoption of the general report with the addition of a course on the methods of teaching health, and differentiation in the practice courses for men and women.
4. The volunteer leadership committee calls attention to two types of leaders: Policy makers; task performers.
   The committee shows how to enlist volunteer workers and prepare them for their work. A schematic outline is given of a course for the preparation of volunteer leaders.
5. The graduate committee report has not yet been received.
6. The committee on personnel presents three tables with a careful analysis of three topics: (a) Qualities necessary for success in teaching; (b) probable causes for failure; (c) selective methods in securing and rating students and alumni.
   Table I in this sub-committee report emphasizes social intelligence as the most important general factor with the following specific traits ranking high: sincerity, high ideals and standards, emotional stability, leadership dependability, courtesy and tolerance. High intelligence quotient seems much more important than high scholastic rating.
   Table II emphasizes inadequate preparation as the greatest single cause of failure.
   Table III indicates that present selective methods result in great losses. The percentage of students finishing their courses from different institutions varies from 21 to 98.
   The committee recommends selection or rejection of entrant on the basis of: (a) his intelligence quotient; (b) his high school achievement record; (c) his professional interest record; (d) his motor ability rating; and (e) his social intelligence and personality rating.

CURRICULUM FINDINGS

The committee made a careful study of the curriculum recommended by the American Physical Education Association in the fall of 1929. From the replies received, the large majority recommended the adoption of the quantitative requirements of this committee.

A careful study was made of catalogs giving a 4-year course with a degree in physical education and recreation, to ascertain the special emphasis placed upon sub-topics under each subject.

This qualitative analysis is included in the report in a table of frequencies. It includes a study of 36 State universities and colleges, 28 State teachers' colleges, and 44 endowed colleges.

A questionnaire sent out by the committee on leadership training received from individuals 3 suggestions for additional courses: A course in safety education; a course in business administration; and a course in music and art.

The committee questionnaire asked four questions which are summarized as follows:

1. State the type of individual who should elect this profession. The principal answers were:

Fine physique	21
Qualities of leadership	19
Love for the work	17
Good health	14
Social abilities	14
Good executive	9
Contagious dynamic personality	8
Good student	7
Christian ideals	6
Love of children	6
Ability to perform	5
Alertness	4
Energy	3
High mental ability	3
Self-control	3
Unlimited enthusiasm	3

2. State any limitations in physique; e.g., height and weight:

Overweight to point of obesity	7
Physical handicap	6
Extreme deviation	5
Too short	5
Poor coordination	4
Exceedingly thin	3
Ill health	3
Physique not a determining factor	3
Poor posture	3
Too tall	3

3. State the most essential personal, social, and character traits required in a good teacher.

Sympathy	10
Cooperation	9
Good posture	9

Leadership	9
Honesty in thinking and acting	8
Bodily appearance 4 Attractive 2	6
Initiative	6
Accustomed to good society	5
Adaptability	5
Humor	5
Patience	5
Sociability	5
Tact	4
Courtesy	4
Good mixer	4
High ideals	4
Personality	4
Sportsmanship	4
Capacity for hard work	3
Emotional control	3
Frankness	3
Good hygiene habits	3
High moral standards	3
Impartiality	3
Integrity	3
Self-control	3
Womanly or manly behavior	3

4. State the personal, social, and character traits most frequently interfering with success as a teacher of physical education.

Weakness of character	9
Inability to get along with others	8
Anti-social nature	7
Careless and conspicuous clothing	7
Unfriendliness	6
Lack of initiative	5
Lack of self-control	5
Lack of sympathy	5
Laziness	4
Lack of culture	4
Poor habits of personal hygiene	4
Self-control	4
Unsportsmanlike attitude	4
Indecision	3
Lack of adaptability	3
Lack of cooperation	3
Lack of interest	3
Poor use of English	3
Selfishness	3

A study of State accrediting requirements in physical education and recreation, summarized in the following table, describes the subject required, the number of States requiring, and the rank:

Subject	Number of States Requiring	Rank
Natural and Applied Science	17	2
History and Social Science	6	5
Psychology	5	6
Language and Literature	8	4
Education	14	3
Physical Education and Recreation	25	1

The summary of total major frequencies in the 36 States giving specific requirements shows:

Natural and Applied Science	79
Education	48
Physical Education Theory	37
Directed Teaching	28
Language and Literature	18
History and Social Science	13
Physical Education Activity	10
Psychology	9

The summary probably reveals the importance attached by the State to different portions of the curriculum.

LEGISLATION

The Committee on Legislation offers no specific legislative program. In the reports of the sub-committees will be found many illustrations and analyses of the relationship of public legislation to recreation and physical education. Nations, states, municipalities, all legislate on the subject—establishing parks and playgrounds, opening public school facilities for the after-school use of public or lay agencies, and prescribing compulsory physical education in schools, and so on. Many are the suggestions and various are the processes as to the scope and desirability of legislative action in relation to programs of recreation and physical education.

GENERAL RECOMMENDATIONS

What should be done? In the main, follow the present track. Strengthen the Government's efforts in and out of the school. Increase and improve the public play spaces. Support better the lay agencies working in the field. Increase and improve the trained, volunteer and professional leadership through every qualified agency.

These are the obvious and immediate steps to take. The present organization and administration of the field, along established lines, have yielded many good results. The rural child and the pre-school child are in greatest need of opportunities for advancing their development through physical education and play.

No illusion exists, however, among the leaders of recreation and physical education, that present methods and organization are perfect. Among them there is constant searching and questioning as to the future.

In broad outline the objectives may be stated as follows:

1. Promotion of normal physical growth and structural development.
2. Maintenance of normal functional balance between organic systems.
3. Development of neuromuscular coordination.
4. Development of emotional control and powers of expression.
5. Development of skill in, and love for, physical activities, preferably those of the out-of-doors, that provide satisfaction and that can be continued in leisure time in the years after school.
6. Development of intellectual conception and judgments which are closely integrated with muscle movements and with the emotional joy of accomplishment, such as in highly skilled acts in games and athletics.
7. Strengthening of such qualities of character as honesty, generosity, modesty, fairness, and loyalty in social contacts through actual practice in games and sports.

In concluding our report we are impressed that the end is only a beginning. Whatever has been done opens a vista to a vast undone. Each study made and digested suggests another important study. It must be hoped that two things may issue from our common efforts.

First: A strengthened resolution to promote the spread of the program of recreation and physical education until eventually all children will enjoy its advantages.

Second: That the great foundations and universities will make possible further research to provide scientific answers to many questions that may not now be answered with authority.

F. COMMITTEE ON SPECIAL CLASSES

THE work of the Committee on Special Classes, White House Conference on Child Health and Protection, deals with the public-school education of all types of exceptional children. The term "exceptional children" as defined by this committee includes the handicapped and the gifted, or those children who deviate from the average or modal child to such an extent as to require special treatment or training in order to make the most of their possibilities. Section IV of the White House Conference, "The Handicapped," is directly concerned with prevention, maintenance, and protection of such children. Hence, these subjects are only briefly considered in this report.

The work of the Committee on Special Classes has been carried on by the following sub-committees:

The Blind and the Partially Seeing; the Deaf and the Hard of Hearing; the Defective in Speech; the Crippled; the Children of Lowered Vitality; Behavior Problems (The Nervous, the Emotionally Unstable, and the Delinquent); the Mentally Retarded; the Gifted; the Training of Teachers; and Organization and Administration.

It is sound public policy, not charity, to provide special treatment and training for all types of exceptional children. In so doing we are making it possible for the children of greatest capacity to make a greater contribution to the common welfare and for the majority of those of least capacity to become self-supporting, instead of dependent or delinquent members of society. In other words, we are both increasing society's assets and decreasing her liabilities. The fundamental principle of special education is to "help the individual to help himself to the limit of his capacity."

THE HANDICAPPED

The need for special education of handicapped children is strikingly illustrated by the 500,000 individuals found in our prisons, hospitals for mental disease, almshouses, and institutions for the feeble-minded. Every year there are more than

70,000 persons admitted for the first time to hospitals for the mentally diseased and more than 300,000 persons committed to prison. Yet for every person who is committed to prison or admitted to a hospital for mental disease, there are several at large who are unadjusted to the complex social and industrial conditions of modern life.

Few investments of the taxpayer's money have yielded as large a return as that invested in vocational rehabilitation. In one state alone, the difference in the amount earned by the disabled during the year immediately preceding vocational rehabilitation, when compared with the amount earned the first year after rehabilitation, was more than 5 times the cost of rehabilitation. If such results can be obtained by the special training of disabled adults who have in large measure lost the plasticity and adaptability of youth, how much more can be accomplished through the special treatment and training of handicapped children? It is unquestionably better public policy to spend more money today in helping the handicapped child to help himself, than it is to spend many times as much tomorrow in supporting him at public expense.

THE BLIND AND THE PARTIALLY SEEING

It is not desirable to educate blind and partially seeing children in the same special class. Not only are the needs of the two groups unlike, but few teachers trained to teach the partially seeing are qualified to teach the blind. Because of the peculiar needs of the blind and the highly specialized technique used in their instruction, and because of the difficulty of getting specially trained teachers, it is most desirable to have a special supervisor for the visually handicapped. If the numbers were sufficient to justify the expense, it would be best to have different supervisors for the two groups. Where this is not possible, the supervisor should be one with training in both types of work.

The most satisfactory method of conducting special classes for the blind and the partially seeing is to have these children sit in their own special rooms where the necessary special equipment and supplies are provided, and where they can prepare their work under the direction of their special teacher, but they should recite as far as possible in the regular classrooms with children of normal vision. This method, which is now generally followed in braille and sight-saving classes, provides for necessary and desirable con-

tacts with children who are not handicapped. Inasmuch as the problem of educating the blind child and that of educating the partially seeing differ in so many respects, this report is divided into two parts, the first of which deals with the blind child and the second with the partially seeing child.

The Blind Child

The blind child is defined as one whose vision in the better eye after correction is usually not more than 20/200. He cannot or should not use his eyes as the chief medium to an education. He is taught braille or the touch method of reading. In the care of the blind child the problem is to educate him in such a way that he will be able to live happily and successfully with individuals of normal vision.

SIGNIFICANT FINDINGS

In the United States there are about 14,400 blind children under 20 years of age. Of this number approximately 6,000 are being educated in state schools, private schools, or in public day schools and classes for the blind. Most of the blind children under instruction, however, are being trained in the state schools. Less than 425 are enrolled in the public schools of the 21 large cities which make legal provision for braille classes, classes for the blind. As in the case of the deaf, the smaller communities and rural districts depend on the state and private schools for the education of their blind children.

The annual per capita cost of educating blind children in state residential schools is $630. In braille classes in the public schools the per capita cost ranges from $120 to $590 a year.

The education of blind children in braille classes is less expensive than it is in state residential schools; it enables the child to live at home; and it makes possible social contacts with children of normal vision. However, the blind child in the state residential school usually is given vocational training which is seldom the case in the braille classes of the public schools.

RECOMMENDATIONS

The outstanding needs in the case of the blind are for more braille classes; for recognition of the importance of kindergarten training; for psychologists who understand the blind; for the early

discovery of special abilities and disabilities; for adequate vocational guidance, training, placement, and after-care; for suitable training of the doubly handicapped blind; and, for an understanding on the part of the general public of the possibilities of the blind.

The Partially Seeing Child

The partially seeing child is one whose vision in the better eye usually lies between 20/70 and 20/200 after correction. He cannot or should not use his eyes in the reading of ordinary print, but he can usually do a limited amount of reading of large print without injury to his vision, although all of his eye work should be reduced to a minimum. The chief problem in the case of the partially seeing child is to give an education without injury to his sight or impairment of his health.

SIGNIFICANT FINDINGS

In States where "sight-saving classes" (classes for the partially seeing) have been organized, it is generally recognized that there is on the average one partially seeing child per 500 school children. If this ratio is valid for the country as a whole, there are over 50,000 partially seeing children who should be in sight-saving classes. On January 1, 1930, there were 350 sight-saving classes, representing 95 cities or counties in 21 States, with an enrollment of less than 5,000 children. Since only 2 of these classes are outside of cities, it is evident that the partially seeing children in smaller communities and rural districts are receiving little special care.

The average per capita cost of educating partially seeing children in sight-saving classes is between $200 and $250 a year; the range from $132 to $331. The training of the partially seeing children in sight-saving classes protects their vision, increases the promotion rate, and enables about 4.5 per cent of them to be returned to the regular grades.

RECOMMENDATIONS

In the case of the partially seeing, the outstanding needs are for the extension of special treatment and training to include not only the partially seeing in the large cities but those in the smaller communities and rural districts as well. Uniform standards of

admission to sight-saving classes should be devised. State aid should be granted in all States not providing it, and vocational training and placement should be extended through the closer cooperation of the public schools and the state rehabilitation service. Standardized intelligence and educational tests should be adapted to use with the partially seeing. Study of the size and kind of print best adapted to the partially seeing is needed, and provisions for the extension of the special education of these children beyond the elementary grades should be made. Better ophthalmological and supervisory service to classes should be provided, and cooperative effort should be exerted in eliminating causative factors in eye-difficulties so that the number of partially seeing may be reduced.

THE DEAF AND THE HARD-OF-HEARING

The deaf are those who were born deaf or who lost their hearing before the establishment of speech. The hard-of-hearing are those who suffered impairment of hearing after the acquisition of speech.

The psychological and educational needs of the two groups are very different. The deaf child upon entering school lacks the mental development, the knowledge, and the social attitudes which result from the acquisition of speech. All these things the hard-of-hearing child has acquired before entering school. The deaf child finds the acquisition of speech and art of lip-reading most difficult, while the hard-of-hearing child who has acquired his speech normally learns lip-reading with comparative ease. The problem in both cases involves early detection, early treatment, and early training.

Some of the Significant Findings

There are in the United States 64 public residential, 18 parochial, and private schools, and 114 public day schools and classes for the deaf. There are 18,212 deaf children being educated in these schools and classes. The enrollment in public day schools and classes for the deaf is increasing at a much more rapid rate than the enrollment in either state or private residential schools. However, public day schools and classes are almost exclusively confined to the larger cities. The smaller communities and rural districts are dependent on state and private residential

schools for the education of their deaf. Unwillingness to send young deaf children away from home has caused many parents to evade the compulsory school attendance laws.

In all public day schools and classes for the deaf the oral method is used, and usually only that method, while in state residential schools other methods as well are often employed.

It is estimated that one and one-half per cent, or 342,000, of the pupils enrolled in the elementary schools of the United States have hearing impaired to such an extent that they should be taught lip-reading. At the present time, lip-reading is taught, outside of special schools and classes for the deaf, in about 60 cities. The magnitude of the work that remains to be done is self-evident. With the invention of the 4-A audiometer it is now possible to test the hearing of forty or more children at one time with very satisfactory results. This means that hard-of-hearing children who require medical treatment or instruction in lip-reading can readily be discovered.

The median teaching load in schools and classes for the deaf is nine pupils per teacher. In thirteen large cities the median annual per capita cost in day schools and classes for the deaf is $264, range $204 to $517.

Cities which are making the most satisfactory special provision for the hard-of-hearing are educating them in the regular grades with hearing children, not in special classes or schools for the deaf. They are given lessons in lip-reading usually once or twice a week as part of their grade work. These lessons are given by the teacher of lip-reading who goes from school to school or to certain well-located schools designated as centers to which the hard-of-hearing children are sent from adjacent schools for their lessons in lip-reading. Excellent results are being secured by this method.

Great progress has also been made during the past few years in the development of residual hearing and in the improvement of electrical hearing-aids.

Recommendations

Standardized intelligence and educational tests prepared for use with these children are needed, as well as objective tests of speech and lip-reading ability, and of special aptitudes. Devices by which this handicap may be early detected are needed, and the methods of treatment and training should be further improved. Closer correlation between medical treatment and special training

are essential. More adequate vocational guidance, training, placement, and follow-up methods are needed, and a study of occupations best suited to the deaf should be made. The deaf children of pre-school age should be studied. The ways of training so that the individual may use residual hearing need further investigation, and the use of kinaesthetic-tactual methods should be extended. A scientific study of the methods commonly used in the education of the deaf should be made, and lip-reading instruction should be extended to all the hard-of-hearing children who require it.

THE DEFECTIVE IN SPEECH

A child defective in speech is one whose speech is so deficient as to require remedial treatment and training. The problem is to discover all children in need of remedial treatment and training in speech, to determine the corrective methods best suited to each type of speech defect, to provide the corrective treatment without interfering with the regular education of the child, and finally, to make provision for follow-up work and after-care.

Significant Findings

Not less than 4 per cent, or more than 1,000,000, of the school children in the United States between the ages of 5 and 18 are so defective in speech that they require remedial treatment and training. Of this number about one-fourth are stutterers.

At the present time less than 60,000 school children with defective speech are receiving the necessary corrective treatment and training. Little work in correcting speech defects is being done outside of the large cities. The method of carrying on such corrective work in many cities is to designate certain well-located schools as speech centers. The pupils needing corrective training are sent to these centers from adjacent schools usually two or three times each week. In other cities the teacher conducts her work in the buildings where her pupil-patients receive their regular schooling. The special teacher who devotes all of her time to this work is usually able to give corrective training to 100 or more children per week.

The average annual cost for speech correction in the large cities is approximately $10 per child. The results that are being secured abundantly justify the expense involved. Even in the case of the

stutterers, after a period of 5 years from the time of the discontinuance of corrective training, less than 7 per cent have suffered a relapse.

The corrective work is more effective if carried on during the early years of the child's school life. It is estimated that if the regular elementary-school teachers were given suitable training in speech correction they could correct two-thirds of the cases which are now being referred to the special teachers.

Recommendations

There is real need of extending the work of speech correction to every "unit" of the school systems of the country. Group and individual speech-correction work should be provided in connection with the regular program of the school. Work with younger children should be especially emphasized since there is more hope of correcting their speech. Children suffering from speech defects should be classified into four groups: those whose defects are remediable, but whose intelligence is so low as to render the advantage of exact speech not worth the effort to secure it (3 per cent); those whose defects are irremediable, such as defects caused by inoperable structural anomalies (2 per cent); those whose defects are remediable but not by the standard methods employed with other defectives having similar symptoms, such as a case presenting complications of two or more independent causes (10 per cent); and those whose defects will yield to standard methods, presenting no complications or deviation as to etiology (85 per cent). Speech clinics to which all problems should be referred should be established in each city or county. Teacher-training institutions should provide well-balanced courses for speech-correction teachers incorporating the following: phonetics, physiology, anatomy, neurology, psychology, education, psychometrics, biochemistry, genetics, sociology, physical education, and speech (artistic and pathologic). Elementary courses in speech disorders should be organized as a part of the training of primary teachers. Research should be undertaken regarding the causes, prevention, proper training and treatment of various speech disorders, and the results should be made known to all workers in the field of special education.

THE CRIPPLED

The problem of the crippled child includes early discovery and early treatment, adequate general and vocational training while in school, and proper placement and after-care upon leaving school.

Significant Findings

There are more than 300,000 crippled children in the United States of whom at least one-third or 100,000 need special education. These are most unevenly distributed, so that careful surveys are necessary in each locality.

EDUCATIONAL ADMINISTRATION

Responsibility for the special education of these children is being increasingly assumed in progressive communities by the local public-school systems. State funds aid in excess cost. Supervision of classes for crippled children is delegated by more recent legislation to the administrative unit for special classes in the state department of education, which has power: to promote and standardize special education for crippled children; to secure the enumeration and central registration of crippled children in local school systems and in the state department; to cooperate with the departments of health and welfare in a comprehensive program for prevention, treatment, and institutional care; and to work with the state rehabilitation department in developing the program for vocational guidance, training, and placement.

Sixteen States authorize or require local school districts to establish special classes; 11 provide state aid, and 9 supervision in the state department. Responsibility for classroom and bedside teaching in hospitals and convalescent homes for crippled children, and home instruction for those who cannot be transported to school is fixed upon local school boards under later laws. Progressive legislation of this character should be endorsed and extended.

The extent of special education under various systems in 1928–29 was as follows: 6 state hospitals and schools enrolled 1,131 children; local public-school classes, 9,851; 7 classes since organized enroll 259; public-school teachers giving full time to education in hospitals were 145, to home teaching, 156. Private schools enrolled 349 children.

SPECIAL CLASSES PRACTICABLE

That special education is practicable in public schools in towns and villages, as well as in larger cities, is shown by the distribution of enrollment; 33 cities of one hundred thousand and over enrolled 8,241; 36 cities of from thirty thousand to one hundred thousand enrolled 1,095; 21 cities of from ten thousand to thirty thousand, 363, while 3 towns under ten thousand and 2 county-wide schools enrolled 151. Provisions for rural children are made in state hospital schools, local residential schools, and provision of boarding homes near city classes, or transportation to county-wide schools.

No public school system can undertake the full load of all complex services needed to provide the complete program of prompt discovery; scientific diagnosis, orthopedic and after-care treatment; special facilities for academic and vocational education, and placement, except through the coordination of the activities of local medical, social, and industrial organizations with the school program.

Assignments to special public-school classes are made upon recommendation of an orthopedic specialist. The policy of admitting children because of psychological, social, or vocational needs incident to physical defect is becoming more general. Corrective treatment is carried on by physiotherapists under competent medical direction.

While the mental range of crippled children is as wide as that of normal children, retardation is a serious problem due to irregular attendance. A study of 3,000 children enrolled in the special classes of 6 large cities shows that 75 per cent are over age. Small classes, individual instruction, and specially qualified teachers are needed to overcome these handicaps. Experience in teaching normal children and special qualifications are generally required; special training in only 27 cities.

Vocational guidance and placement are carried on largely through voluntary effort, though coordination of the services of the Federal-State rehabilitation services with those of the special schools is developing. Only 4 cities report special guidance and placement through the public-school department. Services of vocational-guidance departments should be extended to include counsellors and placement officers.

The average cost of special class education varies widely in different communities, though it generally is about four times that of the normal child in the same local school system.

Recommendations

Training courses in higher educational institutions should be established to meet the need for more and better trained teachers, physiotherapists, visiting teachers, and vocational advisers. The study of methods of providing education in rural communities is needed and the special requirements of spastic children should be investigated. Home and sheltered workshop facilities should be extended; maintenance funds for higher education should be provided; and effective methods of publicity should be developed.

THE CHILDREN OF LOWERED VITALITY

Under the term "lowered vitality" are included those types of physical handicaps which are not distinct and visible. Cardiopathic, encephalitic, tuberculous, and epileptic children along with those suffering from malnutrition are all included under cases of lowered vitality.

The problem is to find these cases early through definite and continuous methods; to rehabilitate them as early as possible through economical medical treatment, proper health care, and adequate social service. The next task is to educate and socialize them through suitable school adjustment, stressing their ability rather than their disability, and to place them eventually in the community where they can do their best work. Ways of following them up in order to determine the efficiency of their treatment, training, and instruction should also be established. The most important aspect of the problem is early discovery of the cases before serious or hopeless damage has been done.

Significant Findings

There are in the United States 382,000 children who have tuberculosis and 850,000 more who are suspicious cases. Approximately 1,000,000 school children have weak or damaged hearts, and of this number about 375,000 have serious organic heart disease. A conservative estimate indicates that approximately 6,000,000 children of school age are malnutrites. The cases of encephalitis and epilepsy, although few in number, are difficult school problems. The detection of the cases of lowered vitality is difficult because

of the invisible nature of the handicap. In large cities reports from parents, teachers, school nurses, school physicians, medical clinics, family physicians, and the department of health are used in the selection of the cases which require the specialized treatment and training of the open-window rooms and the open-air schools and classes.

In these special schools and classes all activities are carried on under the general supervision of the medical specialist and the school nurse. The strictly educational activities are carefully correlated with the health program. Experience has fully demonstrated the possibility of educating the child of lowered vitality while increasing his strength and improving his health. In cities of 10,000 population or more there are less than 40,000 children enrolled in open-window and open-air schools and classes. In the smaller cities and rural communities little provision has yet been made for the special treatment, training, and instruction of children of lowered vitality. The median annual per capita cost of open-window or open-air classes as reported by nine large cities is $169; the range from $100 to $305.

Recommendations

Earlier detection and earlier treatment and training are much needed. A special class should be organized in every school system where there are 10 or more children of lowered vitality, and home teaching where necessary should be provided for the cardiopathic, encephalitic, and epileptic. The greatest economy consistent with efficiency should be practiced in treatment and training. Expert technically trained teachers are needed. Provision should be made not only for vocational guidance and pre-vocational training but also for proper placement in industry of those who are qualified to compete with normal individuals, and for the organization of sheltered workshops for those who cannot stand the stress of occupational work under normal conditions. The public needs to be educated to think of these individuals in terms of their ability rather than their disability

BEHAVIOR PROBLEMS (THE NERVOUS, THE EMOTIONALLY UNSTABLE, AND THE DELINQUENT)

The 3 types of children considered here are not mutually exclusive, since the nervous or emotionally unstable child may or may not be delinquent, while the delinquent child may or may not be either nervous or emotionally unstable. However, all three types are behavior problems, since they are out of adjustment with their environment to such a degree as to require special treatment and training. The problem is to find these cases as early as possible, to decide upon the treatment and training required, and to provide ways and means of carrying it out.

Significant Findings

A conservative estimate of the number of behavior problems would include at least 3 per cent of the elementary-school enrollment. The public schools in less than 10 per cent of the cities of ten thousand population or over have parental homes, special classes, or special schools for these behavior problems. The total enrollment in these parental schools, special classes, and special schools combined is less than 10,000. Five times as many boys as girls are reported as behavior problems.

In these parental homes, special schools, and special classes, are found few children under twelve years of age, and few nervous or emotionally unstable children who are not also delinquent. Few elementary-school principals refer behavior problems to clinics for examination and recommendation until they have reached the adolescent stage. They feel that they should be able to handle these younger cases without outside assistance. The large number of behavior problems among adolescents is striking evidence that the elementary school needs help in the treatment and training of the young incipient behavior problems.

Until recently the nervous or the emotionally unstable child was not even recognized as a school problem unless he was also delinquent. The most promising sign is the advent of the child clinic, the visiting teacher, and the social worker, along with the realization of the importance of correcting behavior disorders in their incipient stages. It remains to be seen to what extent these new agencies for diagnosis and treatment may take the place of the traditional parental school, the special school, and the special

class. It is obvious that the latter as generally conducted have failed miserably in the correction of chronic behavior disorders and have seldom had the chance to correct behavior disorders in their incipient stages. With respect to placement and follow-up work for school delinquents, little has been done.

Recommendations

Only specially trained teachers with strong well-adjusted personalities should be entrusted with the special education of behavior problems. Sufficient diagnostic clinics, preferably under boards of education should be established to make possible early detection and diagnosis of nervous, emotionally unstable, and delinquent children. Adequate training facilities should be provided for them not only in larger cities but also in the smaller communities and rural districts; and facilities for vocational guidance, training, placement, and follow-up should be regarded as an integral part of the training program. The effectiveness of the different types of special training now practiced should be carefully evaluated; and the school work should be arranged in closer cooperation with the home, the court, and with the social and welfare agencies. Parents and the general public should be acquainted with the significance and possibilities of special education and all prospective teachers and administrators in teacher-training institutions should be given some instruction in regard to the detection, treatment, and training of behavior problems. State and Federal aid should be provided to carry out the program just suggested.

THE MENTALLY RETARDED

The problem is first, to find the mentally retarded and segregate them in special classes before they have become completely discouraged through repeated failure; and second, to provide the type of training that will prepare them to engage successfully in unskilled or semi-skilled occupations.

Significant Findings

It is generally conceded that at least 2 per cent, or 450,000, of the pupils enrolled in the elementary grades are mentally retarded to such a degree that they require special education to

make the most of their possibilities. Although 15 States have enacted special laws designed to promote the public-school education of these mentally retarded children, no State has yet succeeded in formulating an adequate program for their education in both urban and rural communities.

Less than half of the cities in the United States of 10,000 population or over have organized special classes for the mentally retarded. The total enrollment in the special classes of these cities is less than 60,000 pupils. Little is being done in smaller cities and rural communities for the mentally handicapped child.

Taking the country as a whole the mentally retarded child is usually not assigned to a special class until he has failed several times in the regular grades. However, in some of the more progressive cities the child is referred to the clinic for examination as soon as he shows unmistakable signs of failing in his school work. The clinic makes the assignment, taking into consideration the child's school record, social background, physical condition, and intelligence. Few pupils are found in special classes with intelligence quotients below 45 or above 75.

That the objectives of special education are not clearly understood is shown by the fact that the subject-matter and methods of instruction used in the regular elementary grades have been carried over into the vast majority of special classes with but little change. The addition of various types of manual activities and more emphasis on health education represent the most marked changes. The enrollment in special classes ranges from 10 to 24 pupils, the average being about 18.

In addition to the training of a regular elementary-school teacher and several years' teaching experience in the elementary grades, the typical special-class teacher of mentally retarded children usually has had some special training in a summer school.

Recommendations

There is a great need for legislation and state aid that will make special education possible for the mentally retarded children in the smaller cities and rural districts; for a better understanding on the part of the general public of the possibilities of the mentally retarded; for better trained teachers; for more careful selection and earlier placement in special classes before the child has become hopelessly discouraged through repeated failure; for subject-matter

and methods of instruction better suited to the interest and capacity of the mentally retarded child; for an experimental study of the educational needs of those children with intelligence quotients between 75 and 85 who are misfits in the regular grades; for a clearer statement of the aims or objectives of special education; for closer cooperation between the public schools and the state institutions for the feeble-minded; for adequate vocational guidance, placement and follow-up work; for more emphasis on the possibilities of the child, and less on his limitations.

DISCUSSION AND RECOMMENDATIONS IN RESPECT TO THE HANDICAPPED

The aim of this discussion is to consider those findings and recommendations which are common to the education of every type of handicapped child. The development of a cooperative program, which it is hoped will result from the White House Conference, must necessarily rest on common needs and common objectives.

The more significant of the common findings are as follows:

1. There is a surprisingly large number of handicapped children of every type who need special education, and a comparatively small number who are receiving it.
2. Special education of all types of handicapped children is almost wholly confined to cities.
3. The less seriously handicapped are more numerous and more neglected than those who are more seriously handicapped.
4. The common aim in the education of all types of handicapped children in the special classes of the public schools is to prepare them to live successfully with persons who are not handicapped.
5. Adequate vocational guidance, pre-vocational and vocational training along with placement and follow-up work are seldom found in connection with the special classes of the public schools.
6. There is a remarkable variation in different cities in the cost of special education for the same type of handicapped child.
7. While much is being done in special classes to remove or reduce the handicap, little is being done to discover and develop special aptitudes.
8. There is marked variation in the laws of the different States relative to the organization and support of special classes.
9. Comparatively few handicapped children have the advantages of early discovery, treatment, and training.

There is general agreement that as rapidly as possible special education should be provided for handicapped children in smaller communities and rural districts; that in the special education of every type of handicapped child there should be some contact with normal children; that as far as possible the child's attention should be directed away from his handicap to the development of his major possibilities; that it is the function of special education to provide adequate vocational guidance, pre-vocational and vocational training, and to place and follow-up handicapped children upon leaving school; that more attention should be given to the discovery and development of special aptitudes; that in naming special classes the name should as far as possible indicate the function of the class rather than the handicap of its members; that there is need for more and better trained teachers; that there should be closer cooperation between special classes in the public schools and state schools and institutions; that certain types of handicapped children can be educated to better advantage in state schools and institutions than in special classes of the public schools; that greater effort be made to arouse the interest and secure the support of civic and welfare organizations in the special education of all types of handicapped children; that state and federal aid be sought to make possible the extension of special education to all who require it; that a study be made of desirable state legislation; that greater effort be made to acquaint the general public with the possibilities of the handicapped; that early discovery, early treatment, and early training are of vital importance; that research be encouraged in all phases of special education; and, finally, that a united effort be made to eliminate the preventable causes.

The Problem

From the facts presented and the recommendations made it is evident that the outstanding problem to be considered by the White House Conference is the extension of special education to all handicapped children who require it. The magnitude of the problem is indicated by the fact that there are more than 3,000,000 children in the elementary schools of the United States who require special treatment and training to make the most of their possibilities. And this number does not include approximately 6,000,000 children who are suffering from malnutrition and 625,000 more who have weak hearts. Obviously, a problem of this magnitude re-

quires for its solution the united efforts of all who are interested in child welfare.

All recommendations relative to the improvement of special education may properly be regarded as but means to its extension. Some aspects of the problem which demand special consideration in the formulation of a progressive far-reaching program, which has for its objective special treatment and training for all handicapped children who require it, are publicity, cost, teacher training, legislation and cooperation.

Publicity

Informing the public in regard to the possibilities of the handicapped child and what can and is being accomplished by special treatment and training is urgently needed. Unfortunately, it is true that the vast majority of the people do not believe that the handicapped child is worth educating.

In the mind of the average individual the blind, the crippled, the delinquent, the tuberculous, and the emotionally unstable are associated respectively with the blind beggar on the street, the crippled war veteran in a soldier's home, the hardened criminal preying on society, the tuberculous patient suffering a lingering death, and the hopelessly insane. To the average individual special education is charity, not sound public policy. As long as such a conception prevails it will be impossible to extend special education to all who require it. Only as a given policy is found to be beneficial to society, as well as to the individual affected, does it receive adequate support.

SIGNIFICANCE OF HANDICAPPED NOT GRASPED

Even the majority of persons engaged in educational work have no adequate conception of the possibilities of the handicapped child and of what can and is being done to realize these possibilities. The fact that there are many cities in the United States of 10,000 population or more in which no provision is made for the special education of any type of handicapped child is striking evidence that many school administrators have not yet grasped the need for and significance of special education.

The majority of the principals of elementary schools have little interest in the handicapped child. This is shown by the fact that few of them have even attempted to organize special classes in

their own schools. It is unusual to find an elementary-school principal who is as much interested in the special education of the handicapped child as he is in the traditional education of the average child.

The lack of interest in the education of the handicapped child is also very marked among teachers of the regular grades. His education is a challenge which the average teacher does not willingly accept. Her interest in the handicapped child is shown by her desire to get him out of her room where he is making unusual demands on her time and patience. For her the special class is a means of relief, not primarily an agency for development.

A PROBLEM OF PUBLIC EDUCATION

The history of the education of handicapped children explains in large measure the prevailing attitude of superintendents, principals, and teachers toward their education in the public schools. Until recent years the education of the blind, the deaf, the feeble-minded, and the delinquent was almost exclusively confined to state and private schools. The treatment and training of these types of handicapped children was not even considered a responsibility of the public schools. While the partially seeing, the hard of hearing, the defective in speech, the emotionally unstable, the less seriously mentally retarded, and those of lowered vitality were admitted to the public schools, their failure to succeed in the traditional school work was regarded as unavoidable, not as preventable.

Home instruction, remedial treatment, vocational training and placement were not considered functions of the public schools. Obviously these traditional attitudes which are still characteristic of many older and more conservative superintendents, principals, and teachers must be changed if special education is to be extended to all handicapped children who require it.

Up to the present time we have largely assumed that it is sufficient to let the results of special education speak for themselves. They have spoken, it is true, but only in a still small voice heard by the few but not by the many.

INFORMING THE PUBLIC

Why not try the method of organized publicity which produced such remarkable results during the World War and which is used so effectively in modern business? Large manufacturing concerns

spend millions of dollars in informing the public in regard to the value of their products, and the results justify the expenditure. If informing the public at a tremendous cost in regard to the merits of a product of more or less doubtful value yields results satisfying to the manufacturer, is it not reasonable to suppose that systematically informing the public in regard to the value of special education to the individual and to society will yield results equally satisfying to those interested in the welfare of children?

There are many avenues of approach to the public mind. Among these are the various national, state, and local agencies; educational, civic, welfare, social, industrial, and commercial organizations; newspapers, magazines and popular books; moving pictures, and the radio. These numerous avenues might be used systematically to good advantage in informing the general public in regard to what the handicapped can do if properly trained.

The organization of demonstration special classes in centrally located cities and counties and in connection with teacher-training institutions would assist in creating a more favorable attitude toward the handicapped on the part of teachers and administrators. A centrally located bureau of special education from which parents and teachers could readily secure information concerning the treatment and training of all types of handicapped children would be an additional means of educating the public.

Just how a campaign of organized publicity should be conducted in order to yield the best results, is a question that deserves careful consideration.

Teacher-Training

One stumbling block in the way of improvement and extension of special education is the lack of adequately trained special-class teachers. The existing status of the training of special-class teachers in the United States is indicated in the following quotation from the preliminary report of the sub-committee on teacher-training.

> Including all institutions granting certificates to special-class teachers, during the past five years, there have been trained an average yearly total of 189 teachers for the mentally deficient, 81 for the auditorially defective, 44 for the visually defective, 16 for speech defective, and 16 for orthopedic classes.
>
> Of the teachers preparing to teach mentally deficient children five-eighths have six weeks or less of training and three-eighths have had eighteen weeks or more.

The majority of the teachers of the orally defective are being given one year of special training, and by far the larger proportion of these are being trained in private schools or in state residential schools for the deaf.

Most of the training of teachers of children with defective vision is being done in various colleges and universities, under the auspices of the National Society for the Prevention of Blindness in intensive six weeks' courses during summer sessions.

Very little has as yet been done in the training of teachers for orthopedic classes. Only two institutions report work in this field; one a university offering eight semester hours, the other, a teachers' college, giving one year of training. Little more is being done in the training of teachers of speech correction.

Teacher-Training Recommendations

The sub-committee makes the following recommendations:

1. Prerequisites for admission to training courses: The prerequisites shall be high-school graduation, at least two years' normal-school or college training, and at least one year of successful training experience with normal children.
2. Training courses: (1) A group of courses should be selected to be pursued by all special-class teachers in common. These should form the basis of the special technical training for the type of child to be taught. (2) Courses should be provided for superintendents, principals, and supervisors, which should be of a general character and intended to orient them into this particular field of education. (3) No person should be certified as a qualified special-class teacher who has not completed at least one year (thirty semester hours) of special preparation for her work.
3. Where teachers should be trained: All training courses for special-class teachers should be given or sponsored by recognized normal schools, colleges, and universities. Whenever any other type of institution offers training courses they should be under the direction of an authorized teacher-training institution, which has the authority to establish curricula and maintain standards.

It is evident from these quotations that teacher-training facilities must be expanded and the period of training lengthened, if special education is to be improved and extended.

The recommendation that all special-class teachers should have certain courses in common and that courses should be provided for superintendents, principals, and supervisors which would orient them in the field of special education is very much to the point. One reason that more special classes have not been organized in

the smaller communities is that special-class teachers have been trained to teach only one particular type of handicapped child. In many small communities there are not enough children of that particular type to justify the formation of a special class. In the large cities a regular elementary teacher teaches but a single grade or half-grade, but in the smaller communities she frequently is required to teach two or more grades. Is there any good reason, then, why the special-class teacher should not be so trained that she can teach two or more types of handicapped children where it is necessary?

The fact that the superintendents, principals, and supervisors while in teacher-training institutions have had no courses dealing with the characteristics and education of the handicapped accounts to a great degree for their lack of interest in the problem of special education.

Furthermore, the teacher of limited special training finds it well-nigh impossible to break away from the traditional methods of instruction in teaching the handicapped child. With poorly trained teachers even skillful special supervisors find it very difficult to improve the work of special education.

Cost

Many more special schools and classes would be organized for handicapped children if it were not for the great cost of special education. The annual per capita cost of the education in special classes or schools of the mentally retarded, the delinquent, the anemic and tuberculous, the blind and the partially seeing, the deaf, and the crippled usually is from one and one-half to 4 times as great as the per capita cost of education in the regular elementary schools. However, in the case of the defective in speech who are instructed in the regular elementary schools, but who are given corrective work by the special teacher, the annual per capita cost of their education is only about $10 more than that of the average child.

Cities differ in a remarkable degree in the annual per capita cost of special education for the same type of handicapped child. For the blind the range is from $120 to $590; for the deaf, from $204 to $517; for the child of lowered vitality, from $100 to $305; for the mentally retarded, from $83 to $454; for the delinquent, from $162 to $741; and for the crippled, from $187 to $593. How-

ever, in reporting some cities may have included items of cost that were not included by other cities.

No large city in the United States is providing special education for all of its handicapped children who need it. Then how can any city justify an average annual per capita cost of $400 or $500 a year for the special education of any one type of handicapped child when it is not providing any special education for many who require it? The fact is, the distribution of special education among the handicapped is like the distribution of wealth among the people—the few have much—the many, little or none.

In some cities special schools for certain types of handicapped children have been erected at a per capita cost twice that of the regular elementary-school buildings, while in these same cities special classes for certain other types of handicapped children are found in basement rooms and in old school buildings not considered good enough for the average child.

From the standpoint of providing special education for all who require it, there is no problem of greater importance than that of determining how satisfactory results may be secured at a minimum cost. Little as yet has been done to solve this problem.

One method that reduces the cost of special education to the taxpayer and increases the interest of the community in its handicapped children is to encourage local organizations to help bear the expense of special equipment and medical service, and to assist in the necessary social service work and in the placement of the handicapped in suitable positions upon leaving school. In certain cities this method is being used with excellent results.

It is a significant fact that special education for those who are permanently and seriously handicapped and for those who have removable handicaps of long standing, not only costs more per year, but generally must be carried on for a longer period of time than is the case with those who are less seriously handicapped. In other words, early discovery and early treatment are effective methods of decreasing the cost of special education and at the same time increasing its efficiency.

If buildings, rooms, and equipment necessary for the special education of each type of handicapped child were more or less standardized, it would result in an appreciable reduction in the cost of special education. Very little reliable work has been done in this direction.

The great cost of special education is one reason handicapped

children are so generally neglected in the smaller communities and rural districts. School districts which are taxed to the limit of their capacity to provide the traditional education for the average child are in no mood to add to their financial burden to provide special education for the handicapped child. There seems to be little hope of making adequate provision for the education of handicapped children in these poorer districts without state aid.

Legislation

The state laws dealing with the special education of handicapped children in the public schools are fearfully and wonderfully made. There are permissive laws with and without state aid, mandatory laws with and without state aid. There are general laws which leave much to the discretion of the state department of education and specific laws which even specify the method which shall be used in the education of a particular type of handicapped child.

As one studies the legislation of the different States, one is struck not only by the lack of uniformity in the amount of per capita state aid provided, but also by the great disparity in the distribution of this state aid among the different types of handicapped children. It is obvious that in the enactment of legislation providing state aid for special education, the relative needs of the various types of handicapped children have received little consideration. In other words, it is not clear from existing laws just what the function of state aid is.

If state aid is the recognition on the part of the State that it is wiser to educate all types of handicapped children in their home communities than in state schools, why then should state aid be confined to certain types of handicapped children as is usually the case? Or, if the function of state aid is merely to help those communities provide special education for their handicapped, which otherwise would not be able to do so, why then should state aid also be extended to wealthy urban districts as is usually done? Again, if the function of state aid is merely to help the local school district start special education for its handicapped children, why then should state aid be continued for an indefinite period of time as is usually the case? Obviously the question of legislation providing state aid is one that stands in need of careful study.

Cooperation

There are in the United States one or more national organizations directly interested in each of the following types of handicapped children: the blind and the partially seeing, the deaf and the hard of hearing, the defective in speech, the crippled, the anemic and the tuberculous, the delinquent, and the feeble-minded. While it is reassuring to know that we have so many national organizations interested in the handicapped, it is disconcerting to learn that most of these organizations are going ahead with their own work as if the other organizations did not exist.

ORGANIZATIONS

What is true of the national organizations is no less true of most state and local organizations for the handicapped. Each is working to ameliorate existing conditions for the particular type of handicapped child in which it is interested, with little or no reference to those other state and local organizations interested in other types of handicapped children. This lack of cooperation finds expression in the legislation which provides state aid for some types of handicapped children, but none for other types.

LACK OF UNIFORM EDUCATIONAL PROGRAMS

It is also seen in the widely varying provisions made for the care and education of handicapped children even in cities of the same State. One city provides special education for the deaf and the hard-of-hearing but makes no special provision for the crippled. Another city cares for the crippled but neglects the deaf and the hard-of-hearing. Even in a city which provides special education for several types of handicapped children, usually there is one type which receives preferential treatment.

It is not surprising that we have not yet succeeded in developing a well-coordinated plan of special education when it is borne in mind that most of the special classes which are now found in almost every large school system were organized less than 20 years ago.

Superintendents of schools and boards of education, with little precedent in special education to guide them, are greatly influenced by local organizations, interested in the care and education of handicapped children, with the result that the nature and extent

of special education provided for a particular type of handicapped child is determined in large measure by the influence of the organization interested in that particular type of child. On the other hand, special education for those types of handicapped children not sponsored by outside organizations is very frequently neglected.

FAILURE TO RECOGNIZE TYPE SIMILARITIES

Until the many individuals and organizations interested in the handicapped recognize that the various types of handicapped children are much more alike than they are unlike, we cannot hope to be very successful in the development of a cooperative program of special education. In thinking of the permanently handicapped, our attention has been centered on minimizing the handicap rather than on developing the major possibilities of the individual. Too frequently we have failed to recognize that the blind, the deaf, the crippled, and the mentally retarded, although they differ widely with respect to their handicaps, are closely similar in their fundamental interests. All desire to make the most of their possibilities, all wish to participate in the common life of their normal fellows, but all fear that they will be avoided, shunned, or persecuted by those with whom they long to associate. If their fears are to be dispelled and their hopes realized, it is necessary that we specialize on strength, not on weakness. Most handicapped children are as well endowed as the average individual in one or more significant traits. It is through the development of these significant traits that we make it possible for them to succeed.

In preparing handicapped children through the development of their greatest possibilities to participate successfully in the life of normal individuals, all organizations interested in the different types of handicapped children have common grounds for a cooperative program of special education. Through a federation of the national organizations interested in the handicapped or through a national council made up of one or more representatives selected by each of these national organizations it should be possible to develop a national cooperative program for the care, treatment, training, placement, and follow-up of the various types of handicapped children. State councils formed in like manner might render a valuable service in coordinating, unifying, and developing the work for the handicapped in the various States.

PREVENTION

A cooperative program in special education cannot stop with the care, education, placement, and follow-up of the handicapped. It must include what is still more important, prevention. Prevention means the elimination of the causes that cripple children in body and mind. In a united warfare against these causes all organizations interested in the handicapped can cooperate most effectively with all other organizations interested in the amelioration of human life, since these same causes which cripple the few are impairing the efficiency of the many. It is fitting that the united organizations interested in the handicapped should lead in this warfare against disease, ignorance, and poverty since the handicapped children in whom they are interested are the most appealing objective evidence of society's failure to control disease and to eliminate poverty and ignorance. If the many national, state, and local organizations interested in the various types of handicapped children once recognize the vital interests they have in common, a cooperative program in special education becomes possible.

THE GIFTED

State-supported colleges, universities, and professional schools are objective evidence that the people of the United States believe in special education for the gifted. To provide special education for gifted children in the grades involves no new principle. It is simply an attempt to do, during the early years of the gifted child's school life, what we have long been doing at great expense during the later period of his education.

As a result of the more recent psychological research we now know that the successes and failures of later life are conditioned to a greater degree by the habits and attitudes of early years than was formerly thought to be the case.

The need for special education of gifted children is indicated by the large percentage of failures in our colleges and universities due, not to lack of capacity, but to bad habits and undesirable attitudes; by the many graduates of higher institutions of learning who do not feel under the slightest obligation to society which made possible their higher education; and by those gifted children who leave school because of dissatisfaction with traditional education.

The Problem

A gifted child is one with exceptionally good intelligence who deviates from the average to such an extent that he requires special education to make the most of his possibilities. The problem is to determine the nature and extent of the special education required to enable him to attain his maximum development.

Significant Findings

It is now generally recognized that the gifted are those who usually have an intelligence quotient of 120 or above. They comprise about 6 per cent of the school population. In other words, there are more than 1,500,000 gifted children in the private and public schools of the United States.

The public schools of only 40 cities have special classes or schools for gifted children with a total enrollment of about 4,000. Practically nothing is being done in small towns and rural districts and little information is available on what is being done in private schools. The special classes for gifted children which have been organized in the public schools of 40 large cities are of two types. In the first type of class the chief aim is rapid progress; in the second, enrichment. Cities which have tried successively rapid progress and enrichment in their special classes for gifted children are in rather general agreement that the enrichment plan is superior to that of rapid progress. Enrichment as practiced by those who favor it does not mean more of the same subject, but adding new subjects.

From the final report of the Sub-Committee on Gifted Children, it is submitted that:

The special classes for gifted children in which enrichment is the aim are practically all conducted on the activity plan; fixed desks have been replaced by tables and chairs. There is the utmost freedom for the children and for the teacher. The usual understanding is that the group will cover the year's work in the academic branches of the usual curriculum for any particular grade and perhaps one new subject. Beyond that their time is their own and in consultation with their teacher they may spend it as seems best. The result is a wide range of activity, following, as far as possible, the desires of the individual children or of groups of children and doing everything with an enthusiasm and a thoroughness that must be seen to be fully appreciated.

The rooms are usually provided with unusually good lists of books including cyclopaedias, dictionaries and other reference books. The children often work as much outside the room as they do inside. They spend considerable time visiting important industrial plants, such as banks, newspaper offices, factories of various kinds, governmental institutions, such as courts, post offices, and educational institutions such as art museums and national history museums.

In the different cities, there is a variety of practices with respect to the time at which segregation in special classes begins. It ranges all the way from the second half of the first grade to the junior high school. However, the trend is increasingly in the direction of early segregation. The few careful studies that have been made of the results of segregation of gifted pupils in special classes show a superiority in general educational performance and a greater development of desirable traits in the children who have had the special-class training as compared with those of like intelligence who have had the traditional training in the regular grades.

Sub-Committee Recommendations

The sub-committee recommends that special classes be formed in all cities where the number of available gifted children will justify it and that the work in these classes be conducted according to the enrichment plan. Steps should be taken to acquaint every teacher, prospective and in service, with what she can do for the gifted child whom she may find in her group. The Commissioner of Education should be requested to promote the consideration of the problem of gifted children, and the National Education Association should be asked to urge upon teachers and administrators the importance of making more adequate provision for the education of the gifted child.

DISCUSSION AND RECOMMENDATIONS IN RESPECT TO THE GIFTED

The magnitude of the problem of special education for gifted children is clearly indicated by the fact that only 4,000 out of 1,500,000 are now receiving it. The wisdom of the recommendation that every effort be made to acquaint the people with the significance of special education for the gifted child is obvious, since an undertaking of such magnitude cannot hope to succeed without general support.

Let the people know that the inventions which have transformed

modern life, the huge organizations which have revolutionized modern business, the great contributions to art and literature which have added so much to the enjoyment of life are the products of the gifted few, and they will understand that gifted children represent the Nation's greatest potential asset. On the other hand, let the people know that more than one-half the wealth of the United States is owned by one per cent of the people, and they will understand to what a great extent the many are at the mercy of the few.

Let the people know that many gifted individuals are in penitentiaries, and many more at large who are working for their own selfish interests to the detriment of the common good, and they will appreciate the importance of so educating the gifted few that they will work for the general welfare. Furthermore, let the people once understand that the social and industrial problems of the present are so complex that their solution is a challenge to the most gifted minds, and they will appreciate the importance of the conservation and development of the nation's greatest human resources, just as they have demanded the conservation of the nation's greatest natural resources. And finally, let the people once realize that hope for the elimination of poverty, disease, and ignorance which are crippling hundreds of thousands of children and impairing the efficiency of millions more can never be realized except through the cooperative efforts of the gifted few supported by the mass of the people, and there will be no lack of public support for the special education of gifted children.

It is significant that in special classes the trend is in the direction of early segregation, and the use of the enrichment method. It seems clear then, in view of the increasing complexity of social, industrial, political, and religious problems, that it is wiser to provide for gifted children a richer, broader, and more socialized type of education than it is to have them complete the traditional course of study in less time.

At best it will require much time to create a general interest on the part of the people in the educational problems of the gifted child, but, on the other hand, there seems to be no good reason why immediate results should not be secured if the recommendation of the sub-committee that all teachers be given instruction in regard to what they can do for the gifted child were acted on by our various national and state educational organizations.

It is hoped that the White House Conference will give this most vital problem, the education of the gifted child, special consideration.

G. COMMITTEE ON YOUTH OUTSIDE THE HOME AND SCHOOL

YOUTH up to 18 years, in the United States, means 47,847,206 young people—growing, doing, playing, learning, working, forming habits, creating attitudes, imitating, judging values and making standards. They are enthusiastic and face the light. To them life is a great adventure. As the next generation, civilization is to be literally in their hands. They are busy unconsciously forming that growth we call character. Of them 28,000,000 are in schools and 4,000,000 have already "gone to work."

OUTSIDE HOME AND SCHOOL

During these years 1/14 to 1/12 of their total time is spent in school. One-third of their time is spent at home in sleep. Varying small amounts beyond that are spent daily in the home. Probably 99 per cent of them are in homes, though samplings indicate one in four is in a broken home. Over 40 per cent of these 18 years is spent outside home and school. From the angle of character growth, these hours outside the restrictions and controls and tasks of home and school are actual determinants, because in them the young person is "being himself," following his interests, is carrying on spontaneous action, trying to express himself.

THE INFLUENCES

What are the organized agencies and influences that this third of our population may meet in the 40 per cent of their time spent "outside home and school"? This committee deals with 14:

1. The Churches, which deal with probably 25,000,000 persons.
2. The Girl Agencies, which during leisure time touch 1,500,000.
3. The Boy Agencies, which enroll 2,100,000.
4. The Neighborhood Agencies, which attract 1,400,000.

Then there are certain influences like:

5. Play-Safety, which reach nearly all in varying degrees. The playground facilities serve 2,250,000 daily.
6. Motion Pictures, which catch the eye of 115,000,000 a week, 1/3 of whom are under 16.
7. Commercial Amusements, other than motion pictures, which lure 2,000,000 daily.
8. Radio, which with its 13,478,600 sets, probably has over 60,000,000 listeners.

9. Reading, which is an indoor sport of most of our 47,847,206 children, though they need to have good books made more accessible.
10. Camping, which is indulged in by probably 8,000,000 people, including 3,000,000 youth.
11. Community Environment, which becomes a force for standards only when there is home and neighborhood interaction.

The conditions and factors encountered by youth in:

12. Industry, with its 4,000,000 youth employed full-time; its 2,000,000 part-time.
13. Rural Life, where 55 per cent of our youth live in rural territory.
14. Institutions, which for about 1 per cent stand "in loco parentis."

SELF-HELP

Into the life of the modern boy and girl there come and converge, many determinant factors. It is difficult to separate them. Studies reveal that among these, home and own-age-companions rank first as character influencers, and in that order.

In presenting these summaries of these 14 factors, the committee urges that sight be not lost of the importance of the primary groupings—the home, the neighborhood, and the town or city—in our plans of future social action. Social service which does not energize these basic units into action and self-service, in solving or helping solve their own problems, tends to defeat the fundamental ends of democracy.

The committee finds ample evidence that our plans for the next decade must be less to "do for" and more to "awaken" and aid and stimulate to "do for themselves," the things needful.

THE CHURCHES

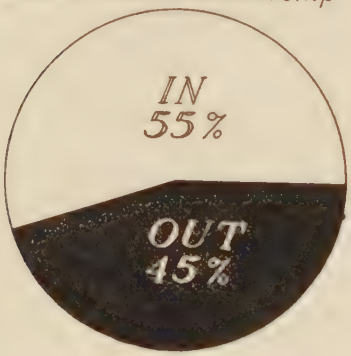
What are the 232,154 churches of our 214 denominations doing with and for youth up to 18 years of age?

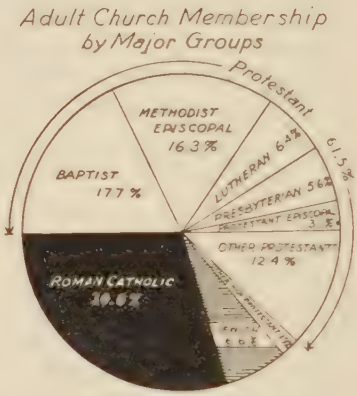
They have 44,380,000 members over 13 years of age—55 per cent of those available at these ages. In spite of there being more men than women in the United States (104 men to 100 women), the churches have as members 5 women for every 4 men.

They have 9 churches for every 10 public schools. They have nearly 4 billions invested in property and spend close to a billion each year.

These two items of expenditure represent respective increases in 10 years of 129 per cent and 149 per cent.

The church, therefore, is not a decadent institution. No indeed! Its membership growth of 17.6 per cent and 18.9 per cent for the past two decades parallels almost exactly the population growth of 17.2 per cent and 19.0 per cent.





Church Activities

What are these churches doing for their young folks?

Worship activities are promoted among the 10,200,000 under 13 years of age who are members. These comprise 18.4 per cent of the total membership. Worship elements are found in most of the special church programs for the young.

Religious educational programs are growing both in volume and variety. Both historically and in volume, the Sunday schools with their 23,000,000 members, which are about one-half of those available, were the largest single enterprise conducted.

This number is only 15 per cent less than the membership of the public schools.

Viewed over a twenty-year period Sunday schools have grown 43 per cent, but the past decade showed only 5.5 per cent increase which was about 1/3 of the population growth. This change is largely due to the rapid shift of Roman Catholics out of their once-a-week Sunday schools into their daily parochial schools, which have doubled by adding over 1,000,000 pupils.

Seventy-two per cent of Sunday schools, like the churches, are in rural territory.

The 2,500,000 officers or leaders provide one to every 10 Sunday school scholars, as compared to one to 30 in the public schools. The number of officers, however, is not keeping pace with scholar growth.

Youth activities constitute a newer and yet-to-be expanded field of church attention to the influencing of youth. The details follow.

Developments

As revealed by the following sections, the most significant developments among the churches are:

1. The wholesome development and growth of their religious education programs for children and youth.
2. The tendency for the church to relate itself to its young people, not only in matters of worship, but in various ways, aiding in adjustment to the actual every-day experience of these younger folk.
3. The growing practice of all churches to think and plan and work together in meeting community needs.
4. Evidence of a wholesome and extensive hunger and returning of a somewhat materialistic and pleasure mad age—to reach out for deeper spiritual values in life itself.

In presenting the three statements of the three religious bodies, the committee is conscious of America's debt to the idealism of the Catholic, the Jewish and the Protestant religions for those conceptions of personal life, associate integrity, spiritually vitalized ideals, and broad social purposes, which underlie western civilization itself.

America, through her entire history, has accepted these three groups, not on a basis of tolerance alone, but on the basis of religious liberty which means equality, and has afforded each the opportunity to contribute to our higher life to the utmost of its ability.

Recommendations

The committee recommends:

1. That parents make fuller use of the church and its program, not alone because of its spiritual values, but also as a needed educational measure.
2. That more volunteers offer themselves for training as leaders in the churches' youth program.
3. That the various bodies continue the best practices of interdenominational comity, in integrating local work to serve local "no-man's-lands" now overlooked.

4. That the national bodies develop ways of making their general programs specific, and hence effective, in actually reaching local individuals.
5. That churches take greater organized cognizance of their young people, through suitable programs and through affording them opportunities for participation therein.

The Catholic Church

Catholic children are Catholics from their birth, receive as infants their initiation into the Church, begin at the earliest age their training as Catholics and have a consciousness of being Catholics, are familiar with the worship and prayers of the Church from early childhood, and at the age of six or seven take on with but few modifications the normal rights and duties of Catholics. Though their training continues, it is the training of full-fledged members and communicants of the Church.

The 1926 United States Census reported 18,605,003 Catholics in the nation, in 18,940 parishes. Of these, 7,255,051 were 18 years of age or under. The primary purpose of each parish is the direction of the Catholics within its territory in the worship of Almighty God. To fulfill this purpose, the Church, in addition to its religious services, everywhere participates in religious education, charitable action, and the promotion of activities to build character and develop leadership.

The religious training of the Catholic child centers around the parish, through the Church itself, the parochial school, or the agencies appointed and sponsored by the pastor for this purpose.

WORSHIP

In worship, there are 7 characteristics significant to this report:

First: In most of the 18,940 parishes there are Sodalities for boys, for girls, and for the younger children, with regular monthly meetings for special instruction in prayers, for monthly reception of the Sacraments of Confession and Communion, for the encouragement of the performance of special acts of devotion. No statistics on membership have been gathered.

Second: Retreats and Missions are conducted in each parish every few years for all young people under 18, consisting of special religious exercises over a period of three days, reviewing the fundamental truths of religion, and closing with the reception of the Sacraments of Confession and Communion.

Third: First Communion Classes are conducted in each parish annually, during which the children reaching the age of six and seven receive a half hour's instruction 5 days a week over a period of six weeks, preparing them for their first reception of the Sacraments of Confession and Holy Communion.

Fourth: Biennially in each parish, the Sacrament of Confirmation is administered by the Bishop; preceded by special instructions one-half hour a day, five days a week, over a three weeks' period.

Fifth: In many parishes throughout the country, there are Junior Holy Name Societies of young Catholic boys who meet regularly to encourage religious devotion and to endeavor to counteract the use of profane language. They receive Holy Communion in a body once a month.

Sixth: On special feast days, such as Christmas, Easter, and so on, and often during the months of May and October which are dedicated to the Blessed Virgin, the children have special religious instructions and devotions including prayers, singing, and processions, in honor of some particular saint or religious event.

Seventh: The personal acquaintance of the pastor and his assistants is a very strong influence in the religious life of the child, as well as the spiritual advice given in Confession.

EDUCATION

In education there are 12 characteristics significant to this report:

First: The Catholic Church in the United States operates for its 2,248,571 students under eighteen, 8,278 elementary schools, high schools, and academies for boys and girls, for the purpose of giving them a well-grounded instruction in religion in the course of obtaining an education. One period of religious education is given daily to these children.

Second: There are 8,239 Sunday schools operated by the Catholic Church, principally for Catholic children not attending Catholic schools, with an enrollment of 1,201,330 children under the direction of 49,498 teachers, chiefly members of religious orders.

Third: There are 1,000 religious vacation schools in 44 States, with an enrollment of between 85,000 and 100,000 children. The program of these schools includes health, recreational, social, and thrift training, in addition to religious education.

Fourth: There are week-day instruction classes in 40 dioceses —half-hour periods, three days a week, after school hours, for instruction of Catholic children not attending Catholic schools.

Fifth: In a number of places without Catholic churches, religious training by correspondence is carried on.

Sixth: There are 6 religious orders of women devoting their time to the training of children outside their home and school. Three of these orders devote their time to the training of Negro and Mexican children in the South.

Seventh: The work of the Big Brothers and Big Sisters dealing with the training and help of pre-delinquent children is organized in 55 cities, and includes provision for religious training.

Eighth: There are 95 Catholic day nurseries caring for children from 3 to 14.

Ninth: In 65 of the dioceses throughout the country, Catholic Bureaus of Charity have been organized. Solicitous care is exercised regarding the religious training of the children who are placed in only Catholic orphanages, foster-homes and homes for adoption.

Tenth: There are a number of national and regional adult societies that include in their activities the training of instructors for children. Among these are the 1,000 units of the Confraternity of Christian Doctrine, several hundred Catholic Instruction Leagues enrolling over 15,000 in one archdiocese alone, and the National Council of Catholic Women.

Eleventh: The Catholic Church operates 357 homes for children, orphanages, and so on, in the country, caring for 54,350 children, and giving educational, health, vocational, and recreational training.

Twelfth: There are 26 Catholic newspapers and magazines in the United States for children, and 36 which devote a page or department to children for their education and instruction.

YOUNG PEOPLES' ACTIVITIES

In its relation to young people's activities, the Catholic Church is conducting more than a dozen organizations.

There are 210 settlement houses, community centers, etc., in the United States operated under Catholic auspices.

Playgrounds, gymnasiums, athletic associations, parish clubs, interparish leagues, and so on, are operated by about 30 per cent of the urban parishes of the country.

Many camps for health and training of children are operated. Exact statistics are not available.

Libraries, lectures, musical and dramatic clubs, movies, and the like, are promoted.

Catholic Boys' Brigades are conducted for the purpose of developing leadership among Catholic boys.

The Columbian Squires, a new activity whose personnel includes the junior members of the Knights of Columbus. The program is educational, social and religious. There are at present 13,700 members. The Knights of Columbus have organized a graduate course in Boy Leadership at Notre Dame University.

There are approximately 1,200 Boy Scout Troops under Catholic auspices with 50,000 enrolled.

There are approximately 792 Girl Scout Troops.

Groups of Camp Fire Girls are in all cities where work has been organized, although the number is not available.

For the training of farm boys and girls in domestic and agricultural pursuits, there are 210 4-H Clubs organized in Catholic parishes.

The National Council of Catholic Women, comprising 1,706 affiliated groups, with a total membership of 429,932 members in the United States, carry on a varied program for the training and education and recreation of children.

Catholic Daughters of America have 15,000 junior members between 14 and 16 years of age in 36 States.

There are National Religious Societies whose main program is the religious instruction of the young and the training of leaders, including the Catholic Students Mission Crusade which has 2,658 crusade units and a total membership of 502,400; and the Students Spiritual Leadership Committee which embraces 840 groups in Catholic educational institutions.

Jewish Congregations

Jewish congregations are established to serve the religious needs of the 4,250,000 citizens of the Jewish faith, who reside in every city of 25,000 or over and in thousands of smaller places. With these congregations are affiliated over 7,000 societies of various types, and there are 7,000 other societies that are independent of the congregations. All these bodies—congregations, congregational societies, and independent societies—are supported by Jews as individuals and not by central ecclesiastical organizations, and their

aim is to serve the religious needs of the Jews and to foster the social and philanthropic work of the Jewish communities.

Children born to Jewish parents are Jews from their birth, are at all times identified as members of the Household of Israel; are made familiar with the worship and observances of Judaism from early childhood; take on, upon completion of their thirteenth year, the normal duties of Jews; and their training continues.

WORSHIP

The basic religious education in the early period of child life is considered the responsibility of the Jewish home. Upon entering the religious school, the children work under an educational program which stresses the training for future participation in public worship. Jewish boys, sometimes also girls, worship with their parents. But the schools have provisions for worship; and most congregations and school societies now conduct "junior congregations" on Sabbath mornings. In the large communities, the Young Israel movement provides facilities for worship for Jewish youth.

EDUCATION

Jewish children attend the public schools and they receive their religious education at Jewish schools maintained by 1,750 societies, of which 1,500 are congregational. About half of the 1,750 societies maintain schools on week-day afternoons and on Sunday mornings, requiring five sessions a week; about one-quarter, once-a-week Sabbath schools; and 1 per cent, parochial schools.

Of the 250,000 pupils enrolled in the schools, about 55 per cent attend week-day afternoon school, about 44 per cent Sabbath school, and 1 per cent parochial school instruction. The main range of ages is 6 to 13. The teachers in the week-day schools and in the parochial schools are professional men who receive compensation for their work.

The average attendance of Jewish children in the week-day afternoon schools is about two years, and in the Sabbath schools, about five years, so that the Jewish schools, which have an enrollment of 250,000 children, are able to provide Jewish education for about four times that number during the school period of the children.

YOUTH ACTIVITIES

The formal training in the schools is supplemented by extracurricular activities of various clubs operated by the schools or

fostered by community centers under Jewish auspices. In the large communities children's camps are conducted both as private camps appealing exclusively to Jews or as communal camps. Seven national organizations direct the activities of 650 youth societies with a total enrollment of 30,000 boys and girls. There is also the Jewish Committee on Scouting with 11 national organizations affiliated.

The programs of the groups vary; but they are all designed with a view to adding to the children's fund of knowledge of matters Jewish, and to implanting in the hearts of the children the faith of Israel, its ideals, and aspirations.

COORDINATION

While Jewish educational societies are autonomous, their work is coordinated and promoted in a number of ways. Many of the larger communities have local organizations dealing with the educational problems on a city-wide basis, and there are 5 national educational offices which aim to coordinate the work of the autonomous school societies.

The Jews aim to provide a Jewish education for every Jewish child, and are approximating that goal with their boys.

The Protestant Churches

While 61.5 per cent of the church membership in the United States are in Protestant churches, yet these 27,515,600 members are divided up among 178 relatively small bodies, most of which have less than 10,000 members each. Concentrated in various geographic areas, due to historic reasons of immigration, only two of them, the Methodist Episcopal and the Protestant Episcopal have as many as three local congregations or more in every State of the Union. Three-fourths have churches in not more than half the States and 18 are in one State only.

This diversity of Protestant bodies is itself an expression of the spirit characteristic of Protestantism, which has always emphasized the right of every individual to have immediate access to God without the necessity of priestly intervention. The efficiency of a Protestant church—a voluntary association of cooperative seekers after the higher life, striving to achieve closer harmony with God and their fellow-men—as well as the extent and variety of its service to children and youth, is determined in large measure by the adequacy of its leadership.

WORSHIP

Here, just as with Catholic and Jewish families, the basic religious education of the most impressionable period of child life is regarded as a home responsibility. Morning and evening family worship as well as prayers at meals and bedtime prayers have been and are practices, though no data are available to show the prevalence of the practices.

Most churches provide some features in their public worship which are designed to appeal to junior interests. Special services for children are further held on Rally Day, Children's Day, Thanksgiving, Christmas, Easter, Whitsunday, and at other times. While some Protestant denominations follow the Catholic and Jewish conception of the child being born a sort of junior member, later to be confirmed therein, probably more of them emphasize the importance of individual choice and acceptance of the Christian way of life, granting church membership and, in some, even baptism, only upon the basis of such a decision. Instruction in preparation for worship and membership is conducted in varying ways and degrees by the 178 denominations.

EDUCATION

Protestant churches share with the home the responsibility for religious education in the period of infancy, and as soon as the child is able to come and learn with his fellows, provision is made for systematic religious instruction at the church. Local churches are stimulated by central denominational boards and by interdenominational and even international associations to use programs and methods which are made available, and to seek to adopt the best and most effective methods in their work. The training of these volunteer leaders and teachers is receiving effective emphasis: 6,950 instructors for standard courses for teachers and 1,333 deans for cooperative training schools have been accredited, and 172,840 credits have been issued for prescribed courses. A large number of churches have employed directors of religious education.

SUNDAY SCHOOLS

Sunday schools enrolling practically one-half of the available young people in the total population are operated by all of the 178 bodies except 16 of the smaller ones. Ten per cent of the

children are under six years of age and 25 per cent are over 21. The average number of pupils per church has increased from 88 in 1906 to 107 in 1916, and to 114 in 1926.

DAILY VACATION SCHOOLS

The 10,000 to 20,000 church schools have a "work-play-study-worship-exploration" program which lasts some three hours daily except Saturday during 3 to 6 weeks of the vacation period. The ages of 1,000,000 served range from 4 to 16, of which about 12 per cent are 12 years of age. Statistics concerning them are very meager.

THE WEEK-DAY CHURCH SCHOOL

During the past year, nearly 1,000 towns and cities enrolled approximately 240,000 pupils in week-day church schools. Two-thirds of these were interdenominational. The program is a "study-worship" program for boys and girls from grades 1 to 12 with emphasis upon 4, 5, 6. Probably one-third of the teachers are employed at least part time.

OTHER TEACHING ACTIVITIES

In addition to Sunday schools, most Protestant churches have other specialized activities for the expressional life of some 5,000,000 Protestant youth—young people's societies, with intermediate and junior organizations, Boy Scouts, Girl Scouts, Camp Fire Girls—while student officership of many special Bible study and missionary societies gives added experience.

One interdenominational society, the Christian Endeavor Society, has 2,500,000. The Epworth League, of the Methodist Episcopal denomination estimates 570,000 members. The Presbyterians have an estimated membership of 200,000 in 3 age groups. The Baptist Young Peoples' Union have 250,000; The Luther League 256,480; The Walther League 129,678; the Mennonites, 60,000; the Evangelical Synod, 4,400; the Reformed Church in America, 16,361; The United Brethren, 51,560; The Methodist Episcopal, South, 250,000; and Congregational Churches 151,903. Both denominational and interdenominational young peoples' Summer Conferences are held. Summer camps under church auspices are multiplying rapidly and reach probably 30,000 more young people.

NEW "CHURCH SCHOOL" IDEA

The modern conception of the responsibility of the Protestant church is that it reaches far beyond the traditional effort to transmit the religious heritage of a denomination and to train youth therein. It reaches into a wider and more diversified program which is life-centered and forward looking. The effort is made to build the program of instruction around the actual life-experience needs of these young people so that the church can aid them in the solution of their own modern problems. One of the difficulties is, of course, that national programs are general and local individual needs are very specific. However, progress is being made.

COOPERATIVE PROGRESS

The report cites that 18 Protestant bodies have been involved in mergers. The committee finds that there are some 9 great interdenominational cooperative endeavors involving some 30 denominations. In local communities the same spirit is encountered and "coming together" locally is helping eliminate the "no man's lands" missed by all of them. The committee finds evidence of a tendency for these Protestant churches to seek to relate themselves increasingly to current social problems, of race relations, vocational guidance, world peace, delinquency, and so on, and recognizing these as matters of primary, spiritual concern, and coming properly within the scope of religious education in a changing age.

GIRL AGENCIES

There are 23,759,985 young women and girls in the United States, 18 years of age and younger. Of these 14,600,000 are in school, while 1,400,000 more are employed. Civilization recognizes in this group its future home-makers and mothers. Conduct patterns are relatively fixed during the pre-school period. It is therefore this group of young womanhood who will administer those vital years as the mothers of the next generation. Womanhood is also in an especial way the guardian of our best ideals. Intelligent culture not only glorifies the incomparable place of a mother in our life, but it recognizes as well her great educational opportunity and responsibility.

While the admission of woman to full educational and legal

equality with men has been gradual, our own country has kept well to the fore in that movement. We have developed a number of national agencies which seek to energize local communities to actively concern themselves about the interests and leisure time of their girls. It is probable that the average girl has less leisure than her brothers about the average home outside of her school time because she is called upon to help her mother in domestic work. This handling of home duties is really fortunate for it constitutes almost the only training for home-making which most of them ever receive. To meet her leisure time and leisure thought and aspiration needs, there have grown up in our country in the past 20 years, leisure-time character-influencing agencies. They enroll 1,151,891 girls. They have 2,315 paid leaders and 105,271 volunteer leaders. The total annual expenditures aggregate over $5,389,299,—a cost of $4.68 per capita.

OBJECTIVES

The purposes or objectives of these agencies are here listed. They reveal that these various organizations aim to complement each other in the community.

Big Sister Federation, Inc.: "To promote the welfare of children and to prevent delinquency especially by using individual volunteers to befriend individual girls before misdemeanors are committed."

Camp Fire Girls, Inc.: "To perpetuate the spiritual ideals of the home and to stimulate and aid the formation of habits making for health and character."

Girl Scouts, Inc.: "To help girls realize the ideals of womanhood as a preparation for their responsibilities in the home and service to the community through a leisure-time program of mental, physical and character-building activities for girls. It aims to supplement the home, church and school and in doing so, it draws upon the educational possibilities of the out-of-doors."

Young Women's Christian Association (Girl Reserve or Younger Girl's Department): "To associate young women in personal loyalty to Jesus Christ as Saviour and Lord; to lead them into membership and service in the Christian Church; to promote growth in Christian character and service through physical, social, mental and spiritual training; and to become a social force for the extension of the Kingdom of God."

4-H Clubs (Extension Service of the United States Department of Agriculture and the State Agricultural Colleges Cooperating: "To help rural girls to do something worthwhile in home-making and agriculture in such a way that they will at the

same time develop into wholesome womanhood in keeping with the interpretation of the ideals indicated in the 4-H Club insignia (Development of head, heart, hand and health); to help improve rural farm and home practices as junior citizens in rural communities and thereby stimulate interest in community progress, to make possible the adjustment of rural girls to their environment in the development of an appreciation of nature and a sympathetic understanding of the finer values in rural life, as well as an interpretation of farming as an occupation that is just; to guide rural girls in developing leadership, vision and cooperation in home and community affairs."

Problems

The problems encountered by these agencies, and reported to the White House Conference, are:

1. Interpreting the objectives of the organizations to the public.
2. Keeping the programs elastic and abreast of modern educational method.
3. Developing and expanding the programs in keeping with the trends of modern thinking in progressive education, science and citizenship as affecting the youth of today.
4. Gaining the understanding and support of parents.
5. Securing adequate funds.
6. Obtaining and holding adequate volunteer leadership.
7. Providing sufficient training facilities for leaders.
8. Preparing adequate and sufficient material for leaders.
9. Helping girls to become adjusted to their environment.
10. Making clear the place and need of these organizations in a community so that it may be realized that the programs do not conflict but complement the work of each other in a single community.

Recommendations

Believing in the values accruing from the work done by the different national girl's organizations in reaching over 1,000,000 girls throughout the United States, and aware of the large number of the 10,000,000 girls between the ages of 10 and 18 still unreached, the Committee on Girls' Work unanimously recommends:

1. That an impartial study be made regarding the program material of the different girls' organizations by adequately equipped individuals to ascertain the effectiveness in attaining the major objectives of the national girls' organizations.
2. That a special committee evolve a basic course of training in volunteer leadership for all national girls' work organizations, and that this course be given in educational insti-

tutions of higher learning and that the various organizations augment this course by a week or more of intensified program training given by their field workers.

3. That research study be made to ascertain the values of organized programs for girls between the ages of 7 and 12.
4. That there be a centralized bureau of camping where programs and structural plans, and so on, of the different organizations may be filed and made available and that this same bureau be responsible for a larger use of the economic investment in camp sites and buildings.
5. That more emphasis be placed in girls' organizations on preparation for marriage, parenthood, and family life.
6. That there be an expansion of the work for unadjusted girls.
7. That the girls' work organizations assume more responsibility in helping the rural girl to become better adjusted when she seeks to earn a livelihood in the city.
8. That there be greater cooperation between the national girls' organizations and the schools in so changing the curriculum that girls may be better fitted to earn their livelihood.

BOYS' WORK

We have in the United States 24,087,220 boys up to 18 years of age. A total of 14,000,000 of them are in school. Slightly over 2,600,000 are employed regularly and another 1,000,000 work part time.

Their nature calls for action and vigorous expressive life. They have one-third of their time as leisure. Leisure brings hazard. Various boys' work agencies have arisen to help these boys through their own activities, their play, their associations, their leader's example and encouragement, and their own desires and decisions —to develop habits, attitudes, standards, and purposes that shall result in conduct at once personally satisfying and socially valuable. Home and school and church are also concerned in varying degrees of intensity and effectiveness with similar activities.

The committee finds the aims of boys' work are as wide as humanity and as deep as life itself. The desire is somehow to help boys to get those things they should get in order to find their greatest, abiding happiness. The purposes aim at the "future" through a growing, going, satisfying "present." The major aim is formation, not reformation. Good is sought, not in status, but in action. The expressive life is encouraged as nature's way to knowledge. Fellowship, cooperation, responsibility, citizenship, and leadership are encouraged and practiced in varying degrees by individuals and by different boys' organizations.

There are 8,007,501 boys from 11 to 18 years of age struggling through that 'teen period of physical, mental, and social stress and readjustment in which influence may be so vital. It is in the early half of these years that the committee finds "boys' work" largely concentrated. Enrollments total about 2,100,000. Here the movement faces its great unfinished task since three boys out of every four of these ages are not reached.

Boys' work enters as an added and supplementing factor and, on an average, operates with the individual boy for about 2 years of contact. One of the goals which the movement might conceivably work toward is the lengthening of this period of interest.

The boys' work movement reaches primarily the boy from an average home or better. Incomplete estimates indicate that only about 30 per cent of the boys' work appeal is made to the underprivileged group. A second goal for boys' work organizations might well be the extension of their activities to reach a far larger proportion of the underprivileged than now. This would, of course, entail strong financial support.

The aggregate operating outlay reported by 6 out of 11 agencies totalled practically $19,500,000 on which human dividends were claimed.

Name of Agency	Adult Leaders		Boy Members	Number States Served	Per Cent Rural	Per Cent Under-Privileged
	Volunteer	Paid				
Big Brothers Federation	25,000	36	24,694	44	0	95
Boys' Club Federation..	245	365	225,500	30	0.2	80
Boy Scouts of America..	230,744	1,816	619,648	48	21.3	23.2
Boy Rangers of America	2,000	0	25,000	47	0	no data
Boy Builders.....	4,000	0	100,000	11	nodata	10
Columbian Squires (KC)	1,558	0	13,700*	32	0.3	5
Order of DeMolay.....	1,000	1	150,991	48	†	Small
4-H Clubs.....	60,000	3,000	305,509	48	100	Small
Knighthood of Youth...	1,264	3	44,242	36	0	no data
Y. M. C. A.....	16,000	1,540	314,134	48	10‡	15
Y. M. H. A.....	.....	500	81,000	36	0	no data

*The Knights of Columbus also aid other programs in reaching another 20,000 Catholic Boys. †208 Chapters. ‡10% under 10,000 population.

Although the national offices of the boys' work movement are centralized largely in the east, the movement is national, as shown in the above table.

The nature of the set-up of these various agencies is such that there is but a negligible duplication in membership. The committee finds a rather wide range of variation in program content and operating method.

Other Significant Findings

Evidence reveals a growing interest in and recognition of a joint responsibility for the delinquent.

The committee finds a growing conviction of the need of expanding the present service as yet glaringly inarticulate and ineffective, whereby the boys' work movement shall be concerned not only with various subject skills—but pay more heed to personal guidance counseling with individual boys. The reports show that boys' work receives greater attention in urban than in rural areas.

The outstanding problems encountered are finances and leadership.

Important contributions of the boys' work movement are being made in health, safety and, to a lesser extent, in vocational guidance. Health work, which is undertaken by practically all of the national organizations, varies from encouragement of and provision for athletic sports and recreation, through educational health propaganda, to actual medical examinations and corrections of defects. In general, the health emphasis is on conservation of health through proper recreation, rather than on correction of health handicaps.

The safety programs stress life saving, first aid, fire prevention, and water safety. More than 1,500,000 boys have been taught to swim as part of the boys' work safety program during the past decade.

Among certain agencies appears a commendable readiness to welcome or to seek research determination of program possibilities, methods, and outcomes.

The bases on which the character outcomes are evaluated are still somewhat vague and quite subjective. As a matter of fact there is, as yet, a dearth of adequate scientific techniques whereby that measurement of outcomes can be made.

Recommendations

The Boys' Work Committee makes the following recommendations for the future development of the movement:

1. Since boys' work has a definite influence toward character building in the local community, it should be definitely con-

sidered as a part of the social work field and should participate more generally in community financial support.

2. That the period between 7 and 11 years and that following 15 years be studied and served in addition to the present concentration of the service from 12 to 15 years.
3. That all boys' work agencies make their programs as elastic and as rich in content as is necessary to reach all the boys in the community who are in need of boys' work.
4. That agencies effect scientific appraisal of the possibilities of lengthening the service-span per boy beyond the present two years of contact.
5. That all agencies cooperate towards serving the unreached three-fourths of present age range and give larger attention to the under-privileged areas.
6. That increased and more effective heed be given to education and vocational counsel and guidance.
7. That because of the determining rôle of the leaders' example and qualities in influencing that by-product we call character, special emphasis be given to the selection of all leaders.
8. That agencies more generally undertake the scientific measurement of the outcomes of their programs.

NEIGHBORHOOD AGENCIES

"To evoke latent capacities in the young, to cherish the settled contributions of the old, and to interpret the spiritual resources of the community toward nobler ends."—JANE ADDAMS.

In those phrases is the program of 450 settlement houses influencing and affording expression to nearly 2,000,000 folk; likewise a program for the 8,000 to 10,000 small town community centers in the United States whose clientele probably exceed 2,000,000; a program for the 724 day nurseries with the 34,000 children they care for at any one time; and a program for the 3,269 agencies and their 11,171 public health nurses who probably make 15,000,000 visits a year.

THE SETTLEMENTS

The committee recognizes that the settlement is at once a service agency and an instrument for social research and experiment. The first settlement was founded by Canon Barnett in the east end of London in 1884; the first in the United States was the University Settlement in New York and was established by Stanton Coit in 1886.

The program of a settlement is dictated by the unmet needs of the locality and the ingenuity and resources of the staff. Friendliness is the common denominator of its relationships. The programs frequently include Americanization, arts and crafts, dancing, debating and dramatics, gymnasium, home-making, music, adult education, activities and classes for the various age groups of young folks, social activities, commercial and personal guidance and information, religious activities, summer camps, civic projects, and so on.

There are perhaps 250 settlements under religious auspices and some 200 in the National Federation. More women (60 per cent to 40 per cent) than men are reached. Women's clubs constitute a major organization among settlements. Pre-school children comprise 5 per cent to 10 per cent of the membership; those from 6 years to 13 comprise 40 per cent; those from 13 to 18 comprise 25 per cent; those from 18 to 25, 15 per cent; and the adults comprise 10 per cent. Usage of the house by the larger portion of these groups will vary from 2½ to 15 hours per week.

Attention is called to an additional influence upon youth in the part played by the great body of private music teachers in encouraging the artistic and cultural outreachings of boys and girls, and the new settlement music schools in our larger cities.

Another is the rapid growth of children's departments in art museums, which are becoming influential factors in the lives of an increasing number of boys and girls with an instinct for visual beauty.

Community Centers and Houses

There are 8,000 to 10,000 community centers in the United States and the number is increasing rapidly. Civilization is based on communities of homes, and communities depend on interaction, doing things together, recognizing common problems and objectives. The community center house provides a vehicle for interaction and joint action. War memorials frequently took this form. Churches and schools are so used, as are lodges and grange halls.

The country as a whole has never been studied as to numbers or program. Recent local studies, however, are cited in the report.

The great majority of the community centers are in small towns under 2,500 where there is real community responsibility. Larger cities, however, often have coliseums, and auditoriums with special social equipment. Chicago is estimated to have 4,000 civic societies. Studies in smaller cities show 10 per cent of the men and 25 per

cent of the women belong. Also there are Chautauquas, forums, clean-ups, law enforcement, and many other groups. Of all these, the average was 3.2 to the village.

A striking characteristic of this country with so many national organizations, is the lack of a central service body for these many kinds of community organizations. A relatively small sum so invested would save thousands upon thousands and bring added effectiveness. There is also a lack of adequate research upon this work and constant evidence of the opportunity for integrative action.

Day Nurseries

There are in the United States today 724 day nurseries caring for approximately 34,000 children at any one time.

In general, the term day nursery stands for "an institution having one primary purpose—namely, the day care of children who remain part of the family unit, but who for social or economic reasons can not receive ordinary parental care."

The nursery was intended to serve, and today does serve, the children of working mothers who are compelled to be breadwinners because of the death, incapacity, desertion, imprisonment or inadequate wages of the fathers. The homes from which the children are recruited are very largely those broken potentially, if not actually, and the day nursery forms a part of the organized social machinery for the protection of children peculiarly handicapped through the inability of their parents to maintain normal family life.

From studies of parental status of nursery children in New York, Philadelphia, and California, it appears that from 14 per cent to 16 per cent of the families using day nurseries are those of widows or widowers; about 8 per cent represent families of incapacitated fathers; from 23 per cent to 36 per cent represent families deserted by the father or in which father and mother are separated; the remaining group, constituting from 40 per cent to 56 per cent represents families in which the father is unemployed, irregularly employed, or employed earns an insufficient wage to support his family which is also dependent upon the mother's earnings.

Public Health Nursing

Public Health Nursing began as district or visiting nursing with the primary motive of providing skilled nursing care for the sick

in their homes—those who did not need or could not afford a full time graduate nurse.

These nurses taught the family to care for the patient between visits and the work became important educationally. They use the family case work method. They also conduct classes, lectures, demonstrations, as the community need dictates. The service has been found necessary both in crowded cities and in open country.

Recommendations

That the settlements be encouraged by the sympathy, understanding, and support of persons who are interested in the progressive adjustment of the subject matter of the arts and sciences to the needs of working people. The chief function of the settlement has been to serve as an agency of research in adapting the riches of civilization to working class communities. This demands the best social brains and leadership which the nation can provide. It calls upon persons of thorough education, wide culture, and broad sympathies to discover methods of bringing the best that is known and thought in the community to the neighborhoods that make up the nation, and it also involves the no less important work of knowing and bringing out the latent and unused powers that reside in the men, women, and children of working class communities. The settlements are just as important for the development of the social life of the Nation as the research laboratories of colleges and industrial plants.

That men and women of good will in the communities of the country should take account of the fact that every neighborhood needs and should have an interested group of citizens willing to serve as planners for the higher life of the given neighborhood. Neighborhoods vary in size from the tiny village of a few hundred persons to the large and complex city neighborhood which may number as many as 10,000 or 20,000 within its limits. Each neighborhood, however, needs the devoted service of a group of people representing life and culture in its many-sided aspects. Every neighborhood should be a place in which childhood and youth can be brought up in such a way as to reap the fruit of whatever human power nature may have dowered them with. And the neighborhood should also be a center in which adults can find interesting and stimulating association with others for mutual recreation, sociability and common action toward fine ends. Such a neighborhood can be

realized only through the united action of citizens under stimulating and competent leadership. Settlement experience has shown what can be brought to pass in neighborhoods in the large cities. Experience has taught also that the development of a true national culture must be partly dependent upon the multiplication of local groups interested in promoting the very best type of local life.

PLAY—SAFETY

Play is universal. It enters the lives of everybody, everywhere, though in varying degrees. To the child playing, these activities are self-validating. To him they are living itself. While at play, the child is happy and his life is completely worth while to himself. Play is a spirit. It makes doing a pleasure and makes of life itself a game. It involves the opportunity for expression. Its motive comes from within. It may be imitative or exploratory or simply aimless action. Yet it is nature's way of learning. The child plays because he enjoys it and nature teaches him as he happily plays.

The educational thought which is probably most soundly reasoned and dominant today insists that education and learning come literally only through activities in which the child finds satisfaction. The field of play and social games are about the only "courses" we have in training the emotions.

The leisure-time agencies for youth are dealing with purposeful play. The conditions involving choices, attitudes, emotions, reactions toward others, which are present in spontaneous play, give play a rare potency for character learning.

Both educational theory and the testimony of widespread experience indicate that in play activities there are highly desirable and occasionally unique opportunities for the training of character, the development of personality, and the enrichment of personal life. These results may be expected, however, only under certain conditions.

There must be an offering of a widespread variety of play activities to serve different ages, both sexes, and an infinite variety of interests, tastes, and talents of the different children.

This offering cannot be effective unless facilities—areas, rooms, buildings, equipment, materials, tools—are available in sufficient number, quantity, and size to meet the needs and demands of the children, and these facilities cannot be effective unless sufficiently

nearby so that they are usable by the children of our cities and countryside.

There must be a leadership of strong, rich, inspiring character, thoroughly trained in a knowledge of child nature and in play activities, in order that children may actually be able to explore a great variety of possible play interests, and in order that the character and personality values may be actually secured from participation in these activities.

Recommendations

Practical recommendations resulting from a study of these various reports may be briefly summarized as follows:

1. Play areas in larger numbers, of more adequate size, more adequately distributed, and of suitable variety, must be provided in accordance with modern planning standards in both city and country.
2. These areas should be made beautiful and adequately designed and equipped for a wide variety of play activities. More specific recommendations in respect to play areas are as follows:
   (a) Such areas should be acquired soon.
   (b) They should increase their educational and recreational service.
   (c) Recreation technicians should be added to staff of the National Forester.
   (d) Congress should appropriate a sum estimated at $500,000 to prepare camp and recreation sites for use in present national parks.
   (e) States should develop and expand a park policy including more areas.
   (f) Expert state leadership should be secured as is now the case in New York, New Jersey, and Indiana.
   (g) Similar enabling laws for counties should be followed by area extension under leadership.
3. Indoor facilities should also be more adequately provided or made available, such as gymnasiums, assembly halls, shops and studios for handcraft and creative art activities, halls, stages, and work shops for dramatic activities, and rooms for musical activities and museums. With these indoor facilities of various kinds should of course be provided apparatus, game materials, tools, handcraft materials, musical instruments, lights, scenery, and other appropriate supplies.
4. Play motivation of activities should more and more be recognized in our schools.
5. Our schools should more rapidly practice that objective of education set forth by the National Education Association,

namely, the necessity of training for the wise use of leisure through opening up to all children opportunity for exploration and cultivation of skill in a great variety of play interests.

6. Programs of activities of the public recreation service in our cities need to be greatly enriched and enlarged and children living in rural districts should also have opportunity for similar rich programs.
7. There is a great need for training in play leadership of all who have to do with children.
8. Proper play leadership in rural districts is especially necessary. Rural school teachers, farm agents, home demonstration agents, 4-H Club leaders, and rural ministers need especially to have training in play activities.
9. Play leaders for public playground and recreation programs in our cities must be more numerous, well trained, of high character, and their appointment must be completely divorced from politics.
10. Those who became leaders in the various semi-public agencies, to which so many millions of our children and young people belong, and which rely so largely for their interest and value on a variety of play activities, need also more and more training in order that their service to the children may be of increasing value.
11. The management of all park and recreation areas and facilities—national, State, county, city—must be in the hands of men and women of vision, who are real leaders, alert and progressive, with educational and recreational ideals and standards, and who are completely free from selfish political domination or interference and devoted to the service of the people.

Back of all these needs and recommendations, of course, lies the need for greater financial outlay, both for capital expenditure in the securing of areas, buildings, places, facilities, equipment, and so on, and also for current maintenance and for leadership all on a scale adequate to the opportunities of the situation. And back of all this lies again the need for more profound and convinced appreciation on the part of our people that, in play activities of various kinds, in good surroundings under qualified leadership, there do actually lie the essential and fundamental values for personal happiness and social worth which the leaders of our modern thinking have realized.

Safety

We kill 18,610 children by accidents each year and maim unknown thousands. Widespread educating of youth in safety is in

process in school, home, church, playground, leisure-time agency, industry, and commerce. The effectiveness of the safety movement is, of course, primarily of major importance in actual saving of life. These results have been large. However, there are additional character results.

Character Results of Safety Movement

1. Safety is a fundamental element to the successful life. The ability to be safe has survival value. This makes a basis for a strong appeal to children for effective character training.
2. In addition, this appeal can be based on the social value of safety, not merely safety from some particular danger, but safety for some desired result—safety for some other adventure. Safety movement includes knowing how to meet danger successfully that cannot or should not be avoided.
3. This implies a criterion of relative value. What are the bad adventures? What are the good adventures? What dangers should be avoided? What dangers should be met?
4. An accident is by derivation "something that falls across" —across a purpose. A study of safety is therefore an approach to the problem of purposeful living.
5. Modern education, endeavoring to bring the child into contact with real situations, does well to utilize such real situations as crossing the streets which presents a very real danger. School boy patrols, for example, help in a real situation, and offer many real character possibilities.

MOTION PICTURES AND THEATRES

Motion Pictures, our fourth largest business, has in a third of a century, become our greatest means of recreation for 115,000,000 a week. The world audience is 250,000,000 a week. Its investment in the United States is $2,000,000,000 and it produces annually 150 million feet of negative and a billion feet of positive representing 85 per cent of the world production.

Enough miles of film pass through exchanges daily to encircle the globe. Films are rented to the 22,600 exhibiting theatres throughout the country and their capacity is 11,300,000 at a sitting. Three-fourths of the patrons are women and girls, and 1/3 are children.

No other form of commercial amusement seems to attract so much critical attention. This is in part due to films prepared primarily for adults, while 1/3 of the audience is under 16 years of age. The visual appeal is potent. The possible effects on the children is a matter of concern. Censorship has been tried by various

cities and States and upheld by the courts. Voluntary constructive cooperation first took form in the National Board of Review working through the committees of 11 leading national organizations.

One real difficulty is that the finer types of pictures, as a rule, are not the ones that are most profitable.

The legal restrictions are both various and numerous. State censoring boards charge a fixed fee per reel of 1,000 feet and thus are revenue producing for the State. Even if state boards were similarly constituted, they still would exhibit a tremendous range of variance in their judgments on any film. It is a difficult situation to effect a balance between extreme restrictions on one hand and the wholesale presentation of entertainment not always suitable to the minds and best interests of the younger audience. Appeal to the police power is a recourse which the individual possesses if he feels he has witnessed an improper motion picture.

Meeting the Problem

To aid in solving their problems, a department of public relations has grown up which is operating an "open door" policy through which open door information goes out and criticism comes in.

Three things are being pushed that concern children:

1. Parental supervision over the types of pictures that children see.
2. Special matinees or family shows, keeping children away from other or too frequent attendance.
3. Demand for more special production of films for children.

The studies of children's movie preferences while not numerous are encouraging. The sixth grader wants "heroic deeds" and spurns cheap melodrama and torrid triangles. The high school preferences show the demand for a "story," a plot with action, with the girls leaning toward romance and the boys toward comedy. These tastes reveal a pleasing sanity.

Regarding special programs for children little has been accomplished though it has been discussed for two decades. A study of Buffalo theatres revealed that 1 in 7 was a fire trap, with 40 per cent of them presenting real fire hazards. Sanitary conditions and facilities were found to be bad.

Throughout the United States the 2,040 larger down-town first and second run theatres are superior theatres to the smaller, but

they have the smallest juvenile patronage. There are 20,000 of the smaller ones. In these, if the neighborhood, acting as a conscious influence, will take an interest, cooperative results in quality of program is found to result. As now carried on, public opinion and interest must be mobilized to reconcile a business seeking profits with an art which would seek beauty.

In churches, the use of motion pictures has been handicapped by the first claims of the theatres which pay the profits, and by the resultant out-of-dateness or worn condition of films, and poor equipment. In a study of 1,497 Protestant churches using films, 64 per cent of 470 replying disclose that they use them Sunday evening. Also 50 per cent count them especially valuable for missionary work, while a few (63) use them at Sunday schools.

A cooperative committee has just made a report urging a film exchange service especially for churches and provision for suitable films.

Amateur motion pictures are now within the reach of average incomes. The Boy Scouts of America, the Y. M. C. A., schools, churches and travelers are using movies. There are some 300 clubs of motion picture amateurs. Here is an attractive new hobby field for youth.

The influence of the theatre was assigned to this committee because the motion picture theatre had so largely supplanted it. Price, attractiveness and availability have been the factors. Youth do not patronize the theatre—20,000 who do not to 1 who does is a conservative ratio. Community dramatics are a social force. Playgrounds report 196 cities with 1,320 play producing groups, boys and girls clubs, scouts, and church societies are giving better plays. Also 137 cities gave 331 pageants and the like. Macgowan's intensive study of the little theatre movement in the United States reveals 25,500 performances during the past season put on by 13,200 groups. "Broadway may be dying," says he, "but never was the theatre so alive in the rest of the United States." As an educational device for youth its tremendous possibilities are recommended for use.

Recommendations

From its investigation, the committee recommends:

1. More "family programs" arranged by exhibitors and increased effort by producers to make available suitable pictures for such programs.

2. Continuation and extension of the work of local "better films" committees in bringing about more cooperation between exhibitors and the public in program building and in the regulation of attendance by children.
3. The further development of "public relations" activities between producers and citizens' organizations, both national and local.
4. More attention by theatrical producers to plays suitable for youth, and the arrangement of special occasions and appropriate admission prices to stimulate their attendance.
5. The encouragement by schools, recreation agencies, and churches of the organization of amateur dramatic groups, and the making available to them of leadership and facilities needed for their activities.
6. Better and more uniform legislation among the States governing the employment of children in public performances.

COMMERCIAL AMUSEMENTS

Attendance at commercial amusements in the United States undoubtedly runs into hundreds of millions yearly. Coney Island in New York City alone entertains over 20,000,000 a year. Estimates based on samplings indicate that we thus spend over $500,000,000 a year. New York City's Internal Revenue amusement tax records show $106,000,000 spent there in 1920. Slightly over half is spent on the theatre, motion pictures, cabarets, and vaudeville, and slightly less than half upon dance halls, poolrooms, amusement parks, carnivals and steamer excursions and off-shoots of these.

This committee has limited its scope to the latter group, motion pictures and theatres having been assigned to another committee. Baseball, ice hockey, football, boxing, wrestling, racing, and other sports could not be investigated within the available time and budget.

This committee feels, however, that all these commercial amusements are interrelated and the general conclusions reached by this committee in respect to the limited number of types studied, apply on the whole to all of them.

The committee has inquired into the character of their activities, type of supervision by owners and by the Community, public regulation of them, and the extent to which they are patronized by adolescents from 14 to 18 years of age.

The various commercial amusements seem to reflect a common attitude and a common interest: the desire for profit. In many

cases, the same individual capitalists or corporations have a financial interest in two or more of these amusements and impose standards common to all. Although they are of course highly competitive, yet trade associations have been formed on a national scale in many cases for mutual protection against the encroachment of legislation and regulation, therefore they must be considered as a unit, and that not only in their economic interest, but as a current reflection of American standards and tastes.

When one enters the realm of commercial amusements one seems to find a world which is a law unto itself. Our educational institutions, our so-called supervised recreations are definitely designed to fit certain behavior patterns which we believe to have social value, but the commercial amusements seem to lie outside these patterns.

However, on closer examination, it is discovered that this is not wholly true. They are undoubtedly the product of our industrialized era. Nothing exactly like their wholesale organization existed in the preceding agrarian civilization, although, of course, the same interests now served by the commercial amusements have existed throughout the ages. The difference between then and now centers almost wholly in the introduction of the profit motive.

When people lived in small face-to-face groups, when they shared work in common, when the patterns of recreation were traditional, and centered around the village common, the church or the school, there was no incentive for the commercial entrepreneur to organize recreations. Today, however, the home has become a mere sleeping place, the village group is no longer the social unit, and each individual is thrown largely upon his own resources to find his recreation, since all traditional patterns of recreational life have been destroyed. So the business man enters upon the scene and has assumed the function of supplying opportunities for amusements needed by the masses after the day's work is over. The connection between the wide patronage of commercial amusements and the American educational system must also be noted. Our system of education in general does not stimulate inventiveness, imagination or initiative. Comparatively little has been done by the school to train aesthetic taste which could be a guide to selections of activities in leisure time.

This situation is changing, it is true, in many of the progressive cities where community recreation programs promoting constructive leisure-time activities are closely integrated with the educational system; but this integration is so recent that it has not affected to

any appreciable extent the widespread participation in commercial amusements nor developed a standard of social values for them to conform to.

Important and gigantic as these enterprises are as a business, their economic importance pales beside their social significance.

Probably 50 per cent to 75 per cent of the patrons of these amusements are children and youth.

Unwholesome Influences

What are they getting out of it?

It might not be too much to say that the commercial amusements are as influential a force for education as we have, not excepting the public schools. Yet comparatively little is known of the social and psychic influence of any of them except possibly the movies, the dance hall and to some extent, the poolroom. Yet the findings of the report will show their influences under business auspices are in the main unwholesome. They affect largely the children of working class parents, those with fewest resources in themselves for constructive recreation. They promote gambling and almost uniformly have a fringe of hangers-on from the criminal class—prostitutes, gamblers, dope peddlers, and so on. In themselves, they offer little of value in the way of imaginative content and development of self-activity.

The connection between juvenile delinquency and the commercial amusements enters also into a consideration of this problem.

The Crime Commission of New York State in its report "A Study of Delinquency in a District of Kings County," believes that "the low grade poolroom is the chief hang-out of the crook and more burglaries among boys between the ages of sixteen and twenty-one are concocted there than in any other single place."

The Crime Commission is also authority for the statement in "A Study of Environmental Factors in Juvenile Delinquency," page 9, that "poolrooms were more numerous where juvenile delinquency was greatest."

The report on public dance halls published by the Children's Bureau in 1929 says, "The stories of crime and debauchery which newspapers reported from time to time as having their origin in one of these parks or academies or halls revealed the fact that they were frequently connected with saloons and so-called hotels which encouraged immorality on the part of dance hall patrons and

tolerated the presence of criminals. Police attended these dances, not as inspectors or supervisors, but in order to be at hand to interfere in case of brawls or too flagrant disorder of any kind." Since the development of the movement to regulate public dance halls, the situation described above has been much improved but many dance halls still suffer from such bad associations, and findings of the present study indicate clearly that amusement parks, carnivals and steamer excursions are frequently the resort of adults of the criminal class.

Efforts have been made to separate these amusements from drinking and gambling, but it may be said with certainty in the light of the present study that this effort has been unsuccessful to date. Prohibition has not lessened the connection between drinking and amusements. If anything, the problem has been worse under prohibition because of the cheap liquor which is bootlegged in these places and the spread of drinking among young people as a smart defiance of law.

No sane observer would say today that these commercial amusements are the cause of juvenile delinquency and crime. However, a relationship exists between the two that is quite clear. What this relationship is, is still obscure, but it indicates the need for comprehensive studies of these problems from a sociological and psychological point of view on a national scale.

Actually these amusements do not arbitrarily set their standards but scale them down as cheaper imitations of the more expensive amusements of the well-to-do. Even the fashion of dancing is set by the stage, cabarets, or colleges.

The monotony of the worker's life in a machine age makes him want "lively" amusement with a minimum of complexity.

Important as these recreations are, economically and socially, despite their standardized and uniform character, the movement for regulation and supervision is still insignificant. Aside from a license permitting operation, in the main no standard of values has been set by which the community may measure their results and no uniform technique been developed by which they can be controlled. It is as if the sale of food and drinks were not regulated by the Pure Food Law, as if public utilities were allowed to operate without control by the Interstate Commerce Commission.

Recommendations

The recommendations of this sub-committee, based on the foregoing conclusions, are, briefly:

1. Better regulation by state and municipal authorities, with special emphasis on the development of regulation outside the larger cities probably on the basis of county units to insure adequate enforcement of standards.
2. More community undertakings to supply the desirable types of recreation under governmental auspices insuring high standards of supervision and more emphasis on constructive activities.
3. Participation by community organizations in both regulation and community undertakings. The present community recreation movement must further extend its program of influence over the standards of commercial recreation.
4. Parent education. There is no doubt that parents in general are ignorant of the great psychic importance of wholesome recreation. The present parent education efforts should be universally supported by those concerned with recreation, since only educated parents will realize the deleterious effect of cheap amusements on their children's mental growth and development and will take steps to substitute constructive activities, thus automatically checking their growth.
5. Comprehensive study of commercial amusements. At present there is practically no information on this subject which has scientific value.

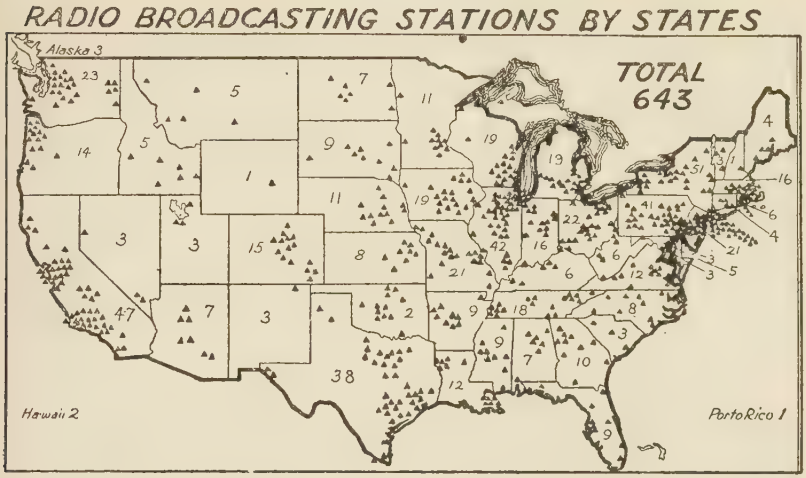
The magnitude of the problem, however, merits study by sociologists and psychologists with an unbiased point of view and it would be of greatest value to social workers in the recreation field.

It would assist the carrying out of recommendation 3 concerning the participation of community organizations in the regulation of this type of amusement. It would also furnish material to be used in parent education programs. At present with no standardized information, the recommendation of each individual in regard to these recreations remains in the realm of opinion.

RADIO

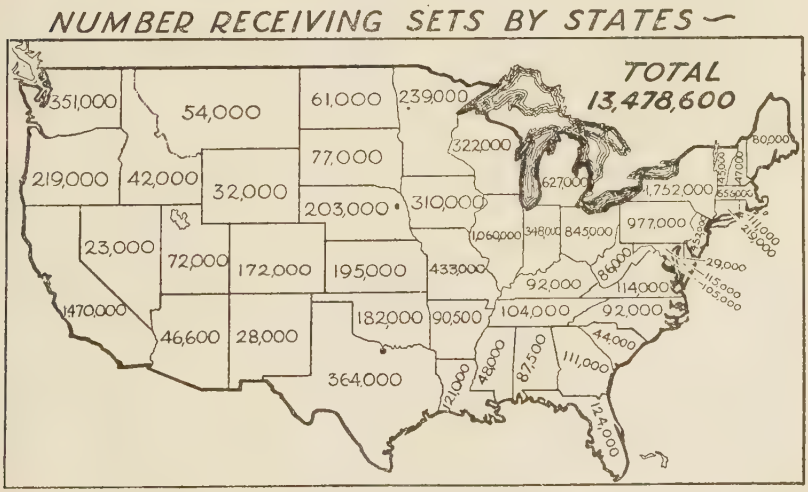
Radio, our newest and swiftest tool of communication, probably reaches half of our population daily. In a half dozen years it has flashed from the status of a hobby to a household convenience. Its past uses for ocean and air safety and for exploration are historic. Its speed is startling: 1/20 of a second is claimed as the record time for contact reply between the "New York Times" and Byrd 9,783 air line miles away in Antarctica.

It now becomes an adjunct of civilization in its reach, second only to the daily press.



From our 643 stations in the United States, the radio voice reaches out not only to our own 13,478,600 receiving sets but across a listening world as well.

We publish a daily newspaper in the United States for every other person. Broadcasting already has a comparable volume.



This committee is concerned about the influence of radio as a force in the life of youth—up to 18 years. Here is a new, unstandardized instrument. What are its values?

In weighing what youth get out of radio, the committee encountered several outstanding problems.

The Problem of Equities

In Europe broadcasting is a government operation; in the United States it is private and commercial. European broadcasts, particularly the British, rely for their support upon subsidies or taxation of receiver sets and profits from advertising in program magazines. In the United States support comes from sales of advertising time.

Educational institutions run 12.35 per cent of our American stations. Studies indicate that 13 per cent of commercial station programs is educational.

From all the facts available as to ownership, maintenance, and trends, this committee concludes first, that there is much to be commended in the present situation; second, that constant attention must be given to all of the factors involved; third, that youth and education have equities in broadcasting which must be safeguarded and placed on a sure and dependable footing.

The Problem of Program Content

What is being broadcast? An analysis of the programs of 24 stations serving 175,000,000 in 12 European countries is here compared with our analysis of 4,002 broadcast hours of 75 stations in the United States.

Program Content	Europe	United States
Music	58.51% (including 7% dance and jazz)	52.96% (including 33.9% jazz and 18.35% variety)
Formal Education	18.09% (including 4% lectures)	1.08%
Informal Education	.....	19.12%
Drama	3.54%	3.38%
Comedy and Novelty	3.01%	2.78%
Children's Hour	2.09%	2.59%
Church	1.05%	5.94%
Sports	0.22%	1.09% (January)
Advertising	.....	8.64%

The Problem of Mixed Audiences

Of course all broadcasting is education, whether good or bad. "Listening in" is still largely a family affair from which young and older alike are open to impressions. How to differentiate such programs for age differential listening is found to be still a problem. So also is the problem of what is good broadcasting and what are its results. Should children have special programs or should adult programs be redesigned to include children and youth? This is presented as a problem for research.

The whole adult education program, then, concerns the younger listeners directly, as well as indirectly through possible improvement of the adults themselves.

Radio Education of Youth

The full report of the committee records the numerous beginnings aggregating over 1,000 hours per day total over our 643 stations. There is a constantly growing list of States and cities where instructional broadcasts are in process. The Ohio School of the air, operated under a state appropriation, is a thoroughly organized and serious entrance into the field. The American School of the Air over the Columbia Broadcasting Company conducted a 15-week school broadcast in 1930, and is trying to perfect plans to go forward in 1931 to serve the 20,000 schools and their 6,000,000 listeners. The Crosley Radio Corporation programs, those of the Department of Agriculture, and numerous local efforts are in process. Teachers College, Columbia University, has aided rural schools to adapt regular programs. The committee finds evidence of great need for careful study of methods and of results. The radio audience if not a truant is at least an absent audience and check-ups are very difficult.

New and substantial appropriations are needed to evaluate this work although the committee finds that it is easier to get funds for research as to the values of a radio program, than it is to get funds to carry forward the program itself.

The evidence is abundant, however, that education has in radio a new and tremendous tool.

Musical Appreciation

Musical appreciation broadcasts have been going forward for years. Cleveland's experience, started in 1925, Wisconsin's experi-

ment, and others point to the high value of the radio in music instruction.

The Damrosch Musical appreciation hour (with 48 graded concerts of symphonic music accompanied by an explanatory comment by Dr. Damrosch) of the National Broadcasting Company has reached an audience estimated at from 2,000,000 to 8,000,000. A total of 55,174 instructor's manuals were distributed. In New York City 350 schools had an audience of 200,000. Fragmentary studies of responses show that here is a great new tool for developing art appreciations.

Personal Problem Guidance

Forty-one agencies have found the giving of guidance and information to individuals with educational, vocational, and personal problems to be a rich field for usefulness. The J. C. Penney Foundation study of the nature, methods and results of their work is given in the full report of this committee.

The outstanding finding was that 40 of these agencies had no follow-up, no adequate staff and financing to carry through and determine the extent to which the guidance proffered had met the needs. The Penney Foundation has cooperated with the National Youth Radio Conference guidance program and its records of 5,000 cases are most significant. The numbers of clients increase regularly as the size of the cities tabulated decreases. It is a service that reaches out of the beaten paths. In the age groups those 25 years and under comprise 64.5 per cent of the cases, with decreasing numbers in the upper ages.

The chief need in these calls was for vocational and occupational guidance and information. Educational, financial and personal problems followed in numerical importance. The committee finds the financing of the "follow through" of such work to be the main problem, as the broadcasting company's facilities are given without charge.

Religious Broadcasting

The committee report reveals that churches are making substantial use of the radio. Seven stations owned by Catholic institutions and time on some 30 other stations are reaching that religious group. Four national Jewish organizations are using 10 to 18 stations in network. About 30 Rabbis broadcast from local stations.

A preliminary tabulation of 20 of 50 Protestant church federations being studied revealed that all are doing religious broadcasting, 14 of them as federations. Thirteen are using studio, 13 receive the facilities free, 10 of them are interdenominational. The Federal Council reports broadcasts of 7,240 hours used 268 speakers over 75 stations in 1929.

The committee finds certain very significant practices in Catholic, Jewish and Protestant radio broadcasting: (1) The policy of seeking freedom from offending other religious bodies; (2) the recognition of individual liberty of worship, and the effort to have the message be one that contributes in common to moral values and to good citizenship; (3) in the Protestant group, experience is recorded indicating that the growing tide of interdenominational Protestant message is effective by avoiding denominational differences and making for a unity in the common interest in promoting religious living and growth; and finally, (4) the committee finds very little special provision for young people.

Recommendations

The committee recommends:

1. That adequate provision be made to guarantee definite place for educational broadcasting as a youth influence.
2. That thorough technical studies be undertaken and techniques be sought to measure the programs, the methods and the results, and that if and where needed, funds be sought to continue work found beneficial.
3. That while radio is relatively free from pernicious programs that it must be cooperatively kept free from them by active expression of public opinion and good taste.
4. That foundations and philanthropists and social agencies approach the use of the radio tool with a consciousness of the need for financing growing personal service aspects which involve staff and correspondence costs usually unforeseen and discourage such attempts unless adequate "follow through" is assured.
5. That the fine American policy of avoiding offence and giving cooperative courtesy as practiced by the leaders of religious broadcasting be adopted. The committee further recommends that these religious groups face the question of more consideration of their younger listeners.

READING

Next to persons, books are our greatest influencers of character. The 20 leading countries printed about 100,000 new titles or editions last year. The United States, England, Germany, and France, each publish more than 10,000 new titles a year.

The government reports 64,170,451 text books sold last year for our whole school system, while the census of manufactures indicate that in 1927 we manufactured 225,000,000 books.

The daily circulation of our newspapers is 66,305,151, and this for millions constitutes almost the sole, available reading.

We have 36 periodicals with circulation over a million and 75 more, with over 20,000. Outside the field of the publications of religious organizations, 14 children's, boy's, and girl's magazines have a total circulation of 2,094,578.

In 1929, of our 10,187 new titles or editions, 931 or 9 per cent were for children. This was an increase of 22.3 per cent over the year before. Children's books have doubled in the past 10 years. Never have we been doing so well.

But this picture of volume fades as we check up on the individual. Uncounted thousands of children grow up without ever owning or reading a good book other than school texts.

Rural samplings show, for example, but six homes out of 523 with a child's magazine. Practically no books were owned by any family and no public library was available.

Recent estimates indicate that the reading public is less than 47 per cent of our population. The average American buys but 2 books annually, reads but 2.13 library books a year, and spends less for books than for greeting cards.

Recognizing that children, given the chance, seem to take to reading naturally, specialists have found that there still are outside stimulants such as story telling, reading clubs, posters, pictures, visits and travel, exhibits and lists of books, motion pictures and radio. Individual differences are so pronounced that the individual really must be the unit of seeking a reading program for him. The real aims of instruction in reading and literature are the formation of lasting reading interests, discriminating tastes, realization of usefulness of books and a love for what they bring.

The committee finds that what children read is largely a problem of accessibility. Apparent poor taste may only indicate poverty

of choice. Commercial zeal in distribution may result in making widely available something poor in quality.

Publishers and librarians have discovered the appeal of the attractive, artistic book and have found that books to be popular need to parallel child interests.

Boys emerge from a period of child reading into predominantly scientific and technical, while the girls diverge into romantic books. This scientific interest drives boys a bit earlier into current newspapers and magazines to find the "latest" about their special interests.

Habits of reading seem to tend to become more individual and quite fixed by the sixteenth year. The majority probably are at work by this period and find in the daily press and the sensational story magazine their reading thrill. The objection to much of the low-grade reading materials is that they cumulatively present, as the movies do, a distorted picture of life.

It seems that gifted young folk read more than the average or below average. It seems that between rural and urban children the differences are less marked than they are between those growing up in the foreign atmosphere of an unassimilated foreign home.

Librarians find indications of inherent differences between Negroes and whites beyond differences due to environment. Here is a service field, to write for our 11,000,000 Negroes.

The relation between reading and eye strain and health requires attention.

Indications are that home libraries unfortunately play a relatively unimportant part in the reading of American children. Parents find it difficult to find good juvenile books on sale and as a result the child turns to whatever few adult mazazines the home affords. That fact that these magazines are edited for adults gives them a false balance for young folks as content analysis reveals.

The establishment of a well-illustrated and well-edited informational and literary magazine for children has been repeatedly urged by librarians.

Present circulation reaches about one in seventeen. As already cited we continue to increase our output of improved books for children. In 1928 juvenile books were one-seventh of the total manufactured. But outlet for them is difficult and limited. Price reductions have been tried yet the limited circulation remains a problem. Too few children's book shops exist. A few good subscription books

have been successfully pushed—one to the extent of 240,181 in 10 years, a supplement to 78,000, and still another to 25,000 in one year. Many parents, however, have wasted money on well-bound subscription books injudiciously selected. Junior book clubs have sought to bring a book a month to children but the commercial results have been discouraging.

The public libraries, 6,000 of them, are one of our great institutions. They are in all large cities and in many smaller and in a few rural areas. Forty-three per cent of our population live in communities without such service and only a small percentage of the population are actual users. In New York City, 5,248 people use the reference department daily, while 30,419 books are loaned for circulation each day. But the population of the areas involved is 3,133,000. If each book taken out had been taken by one person, those using the library on any one day would have been about 1.1 per cent of the population.

Of the books in circulation, 39 per cent were taken by young people under 16 years of age. Children's rooms, library cooperation with school assignments or scout subjects have heightened interest. Children's librarians are called for. The demand exceeds the supply. Only 7.3 per cent of the 12,000 members of the American Library associations are children's librarians. More adequate financing of library work will add to this new and vital branch.

Rural areas are being offered library facilities through county and town units. The book automobile, or library on wheels, is often a feature. The distribution of books by mail is reaching out in 37 of the States. Forty-six of California's 58 counties and 10 of New Jersey's 21 have developed county library facilities. However, there are only 286 of the 3,061 counties in the Nation with county and township units.

Of 25,000 secondary schools, only 3,000 are known to have well-organized libraries. The value of such facilities are recognized in the standards of regional and other standardizing agencies, but too often school libraries are either ill-suited to the needs or are not used. Social agencies like churches, the Y.M.C.A., the Y.W.C.A., Scouts, 4-H Clubs and others are developing programs of cooperation with libraries which tend to make library users out of their members. Much progress will be made here.

Recommendations

The committee submits the following recommendations:

1. Public library service should be made available to the 54,000,000 people, about 20,000,000 of whom are children, now in places without it, through the establishment of municipal and especially of county (or other large unit) libraries.
2. The establishment of such libraries and the improvement of libraries now in existence, and particularly the improvement of specialized service for children, should be made possible by generous local appropriations, by state aid and by federal aid, and should be encouraged by the strengthening of state library extension agencies.
3. Every school should have a library and every school library should be in charge of or under the supervision of a person professionally qualified to select books and to direct reading as an important part of the work of the school and of the life of the child.
4. The development in every child of a permanent and desirable habit of reading should be the prime objective of the teaching of reading and English literature in the schools.
5. Parents should be made aware that theirs is the chief responsibility for stimulating an interest in good reading and for making books available in the home. Associations of parents should place increased emphasis on that part of their program which affects children's reading interests and should give their endorsement to all projects for the establishment and improvement of agencies which provide good reading matter for children.
6. Publishers should continue the splendid publishing programs of the past 10 years which have brought to children some of the best work of the finest present day writers and artists; they should be encouraged to extend their publishing programs to include suitable books of various sorts needed as indicated by scientific investigations and recommended by competent observers. It is also urged that further efforts be made to make available at low prices the best in children's literature.
7. A spirited, well, written, purposeful, illustrated magazine for young children should be provided.
8. Writers and artists should be encouraged to give their fullest creative ability to children's books and magazines.
9. Book stores should be encouraged, and they should be urged to employ as salesmen people trained in the selection and use of children's books, and to promote purchases by mail from rural areas.
10. Institutions, organizations, churches and special-interest groups of all sorts are urged to develop a library service

designed to meet the reading and study needs of their groups, especially in communities without public libraries.

11. All methods that stimulate children's reading and create appropriate habits of reading should be studied and used intelligently and persistently by librarians, teachers, parents, and all adults interested in child education and welfare.
12. Scientific studies should be made, by persons equipped by training and experience, of the reading preferences of children, of the influence of reading on character, of the place of books, reading, and libraries in the teaching process, and of the individual and social factors which affect the wise use of books by children.

Conclusion

In conclusion, the committee repeats that the problem of promoting good reading among American children is, above everything else, a problem of making good reading matter accessible.

CAMPING

The camping movement, in the United States, probably has over 8,000,000 annual participants, of whom over 3,000,000 are under 18 years of age. It is part of a well-nigh universal re-discovery of the out-of-doors by practically all of our population. With an automobile for every 5 running on 3,424,233 miles of highways along and across uncounted thousands of miles of rivers and streams, with 179,116,728 acres of national and state preserves and parks, with increasing leisure, a large portion of the population seeks the open spaces.

As our machine industrial age crowds the cities, we need the touch of camping to balance our nervous life as well as to minister to the age-old primeval urges with which our racial past endows us.

Camping has grown so rapidly in the past 10 or 20 years, that no one in America knows exactly how many campers we have. Churches, leisure-time agencies, settlements, Chautauquas, lodges, clubs and societies, schools, and health associations, have over 2,000,000 who camp. The tourist campers via automobile mount into millions. Here is a tremendous enterprise which started as an outdoor, health project, and is now revealing that it is primarily an educational device of rare values, as long as it is allowed to remain interesting to the campers.

Values of Camping

It is an attractive, relatively controllable educational device—full of spontaneous urges to do, to learn from nature, necessity, leaders and one's fellows. Responsibility is accepted. Social control is seen from a new angle—as needs arise. Adjustment is made with other personalities. Regular living and outdoor play are full of health values. Handcrafts are practiced. Morale is high, for camping is fun. Spiritual values are abundant. Here is a setting for education at its best.

The committee finds among those promoting camping, even as among most character influencing agencies, the tendency to measure outcomes in terms of hopes. It seems to be easy to assume that since certain character values are aimed at by the program, that therefore these values are secured. Because certain situations make certain results possible is no assurance that these results will eventuate. The great constructive values outlined above are realized to degrees that vary with the camp, the leader, and the camper. The fine wholesome values of friendship, activity, sportsmanship, leadership experience, actual learning, and spiritual enrichment are immeasurable.

Improvement of Camps

The committee finds abundant evidence that camps and camping are improving and advancing their standards. But leadership, finances, suitable sites, health program, turnover, crowded schedule, inflexible programs, and safety, are still live problem factors which condition results.

The committee finds wide expression of the felt need for a truly national and inclusive clearing house and integrating agency for camping.

Recommendations

1. We recommend to parents and agencies a wider use of the exceptional values in camping.
2. We recommend that all agencies give greater attention to the selection and training of their leaders. Experience and methods checked by the committee warrant the recommendation that cooperative lists of undesirables be maintained to protect our youth.
3. To the end that the best methods of meeting problems may

be found and adequate studies of camping methods and outcomes be furthered, and public educational campaigns be conducted and adequate personnel controls be maintained, we recommend to the national leaders of camping that a truly inclusive and representative national camping association be organized, with national offices under superior leadership, to effect these and related and implied objectives.

COMMUNITY ENVIRONMENT

Interaction among its members is necessary to form a home. Interaction among its homes is necessary to form a community.

Chief among the mental and social conditions in "community environment" is a situation such that neighbors live in more or less awareness of each other and of the local public opinion. Another requirement is a sufficient similarity in standards and scales of living to make feasible the voluntary efforts to promote common interests whenever the disposition arises. Thus in any fairly distinct locality where one encounters various associations of residents to preserve residential character, support playgrounds, further cooperative relations between parents and teachers, or sponsor local units of the Scouts or similar character-forming agencies, one finds a community environment.

This environment, on the other hand, is generally absent from the slum, from sections occupied by big apartment buildings which provide no parks or common recreative facilities, and from other residential sections where the social situation is such that families are able to carry on home-life and rear children in utter unawareness of neighborly opinion and with no resort to neighborly cooperation.

Correlation of Delinquency with the Absence of Community Environment

Recent sociological literature records numerous researches in this field. Perhaps the most extensive inquiry is that which was carried on by the Chicago Institute for Juvenile Research for over eight years and is based upon data regarding 60,000 juvenile delinquents and adult offenders. One of its leading conclusions is as follows:

> This study has indicated that school truancy, juvenile delinquency, and adult crime, rather than being distributed uniformly throughout the city of Chicago, are largely concentrated

in certain areas. The highest rates are found in the areas adjacent to the central business districts and the large industrial centers, while the lowest rates occur in the outlying residential communities . . . areas that are in a process of transition from residence to business and industry and are characterized by physical deterioration, decreasing population, and the disintegration of the conventional neighborhood culture and organization.

The results of other studies in this field are indicated briefly in the following quotations:

In the zone of deterioration in the modern city, there develop areas of demoralization, of promiscuity, and of vice.

In our studies of the city it is found that areas of mobility are also the regions in which are found juvenile delinquency, boys' gangs, crime, poverty, wife desertion, divorce, abandoned infants, vice.

There is a high percentage of mobile population, such as temporary boarders and roomers, unsettled families, persons moving up in the social scale, and persons moving down the social scale, all of whom come into secondary contact with the young people of the area, but do not form a united attitude or have any definite group mores regarding the details of life of the young people in the neighborhood.

Social mores are determined by the group. Social control is dependent upon the mores. Where there are no group affiliations, no group attachments, no group control, there occurs increased social maladjustment and delinquency as compared with the rest of the community.

Presence of Community Environment an Aid to National Character-forming Agencies

A survey of the records of the Boy Scouts, Girl Scouts, and Camp Fire Girls organizations reveals that their unit elements flourish most abundantly in residential sections where neighborhood life prevails. The reason for this is plain when one considers the social conditions required for the establishment of a local branch. In other words, the formation of a troop requires the existence of four or five adults so keenly interested in the welfare of a particular group of youth that they are willing to give time and thought to the improvement of their leisure. Surely such interest is most likely to be found where families know other families in the neighborhood. Many troops are connected with churches, but these churches are most often found in parishes where face-to-face conditions obtain.

The existence of a similar neighborly situation also favors the rise of a Girl Scout Patrol or the formation of a local unit of Camp Fire Girls. Essentially the basis is that of a community environment.

Comprehensively Planned Real Estate Developments Tend to Create a Community Environment

A study of 41 real estate developments revealed the existence among their residents of a large number of voluntary associations. This report says:

> . . . These groups in order of frequency of occurrence are: men's clubs, womens' clubs, boys' clubs and girls' clubs, including scouts, young people's groups, dramatic groups, tennis clubs, golf clubs, garden clubs, music clubs, parent-teacher groups, art and craft organizations, card clubs, bowling clubs, nature study groups, and a scattering of others. . . . On the whole however, it is a matter of note that clubs and groups organized for recreation, child care, education, art, civics, social service, cooperative buying and a host of other objects have sprung up, as soon as the people realized that they were more or less permanent neighbors.
>
> . . . Concerts given by a musical group, drama by the local society, a minstrel that becomes an inclusive community affair, a pageant of all groups, Christmas celebrations and caroling, a series of Fourth of July affairs—these are occasions for all the family to participate in and for all the neighbors to engage in activities in some respects analogous to the old husking-bees and quilting parties. . . .

Any district in which the people are continually meeting in numerous local associations is bound to exhibit community characteristics. The planned development creates this desirable social environment through two distinct processes: (1) It automatically brings together as residents a class of people of similar standards and similar scales of expenditure. (2) Through the provision of certain common facilities, such as parks and playgrounds, or of a distinct residential character, it sets up a situation in which the residents are forced to associate and to enter into concerted efforts in order to preserve and promote their common interests.

City Planning and Zoning Can Promote Community Environment

A community environment, it seems, is created in the modern city whenever a new subdivision provides certain common rights or facilities for the preservation of which citizens enter voluntarily into various associations or concerted efforts. Such facilities include school sites, playgrounds and parks.

Until the last few years, there has been no method by which a municipality could induce developers to include common areas or facilities in their subdivision plans. Procedures are now being developed whereby this difficulty can be overcome. Representative committees of the American City Planning Institute and the National Association of Real Estate Boards have agreed upon a set of principles covering the control of subdivisions and which provide for a master plan designating plots for these community uses.

In two States, New York and New Jersey, laws have been passed which authorize the appointment of city planning commissions having the power to put the above principles into force.

Recommendations

The committee recommends:

1. The general passage of similar laws and the creation of such commissions with powers to educate subdividers regarding the financial advantages of community features in their new subdivisions.
2. That, in built-up residential districts, existing neighborhood environment be preserved, perhaps in some cases improved, by more careful zoning and by a consideration of the local community requirements in the location of elementary school districts, small parks and major streets.
3. That in general the number of planned residential districts be greatly extended through the pressure of public opinion and the growth of enabling legislation.

YOUTH IN INDUSTRY

When the army of 3,000,000 high school boys and girls throughout the United States have settled down to their studies at 9 A.M., more than 4,000,000 youth eighteen years of age and under already have begun their day's work in factory, farm, bank, store, or office. In times of business slack several hundred thousand of them will

be standing in long application lines or hopefully awaiting their turn in employment offices. Another million, perhaps more, will be found at work for wages before or after school and on Saturdays. Last year 279,000 boys earned $51,000,000 delivering papers.

Samplings show that one-fourth of those who went to work disliked school, one-third could not afford to stay in school, while another one-third followed traditional family practice and went to work.

Employment

The committee has studied the 10 year records of 19,646 junior placements and found that immediate opportunity, as offered through familiar tasks, is probably the major determinant in getting the first job. Thirty-seven per cent were aided by relatives and friends, 28 per cent got their own jobs, and two-thirds of them received almost no skilled guidance from social agencies. Once on the job—this anticipated romance and escape from school into self-direction—the boy finds the actual job unlike his hopes. He changes jobs. In New York State's check-up on its 16 to 18 year olds, over half held their jobs less than 6 months; 40 per cent, 3 months; and 27 per cent held from 4 to 10 jobs. In Boston, 53 per cent of the first regular positions lasted less than 3 months; 16 per cent less than a week.

CENSUS STATISTICS ON OCCUPATIONS OF BOYS

Occupation	10–13 Years, Per Cent	14–15 Years, Per Cent
Agriculture	85.7	52.2
Mining	0.2	1.4
Manufacturing	2.6	21.4
Transportation	0.7	3.1
Trade	6.3	7.2
Public Service	0.1	0.2
Professional Service	0.1	0.4
Domestic or Personal Service	1.9	2.5
Clerical	2.4	11.7

The chief character values of these early days of employment may be negative although promptness, regularity, accomplishment, and the pride of making one's way are positive values.

In the chaos of these early years of adjustment is an opportunity for the far visioned employers who can see that investment in their junior staff pays real dividends in greater production and lower turnover and in a better employee.

The committee's study of personnel practices of some 50 leading companies reveals a gradual but certain growth of junior personnel consciousness.

SAFETY AT WORK

Safety is so well understood as a movement that the committee will only refer to the 100,000 boys constantly on the streets as messengers. The small employers do but little. The telegraph companies, with their 20,000 boys have made progress. Among the 15,000 messengers of the Western Union, the ratio of accidents has been reduced to one per boy per 7½ years.

Employers and all dealing with youth, no less than motor drivers, should become "safety-minded" for youth.

Unemployment

Seasonal changes and the swings of the business cycle from prosperity to depression causes something over 10 per cent time loss to youth. One-third of them when out of work are out two months or longer. Meantime onward comes the steady stream of new workers who represent 40 per cent to 50 per cent of the usual total of work certificates.

Unemployment is tragic as it disturbs regular habit-forming routines and throws the young worker out of balance and exposes him to more extreme hazards. To meet these conditions, the committee recommends:

1. Industry should be stabilized through a longer time policy unit which can adapt the industry to the business cycle and then control it.
2. More junior employment exchanges and better coordination with school program for most of those under 16.
3. Continuation schools for the unemployed.
4. Vocational guidance during readjustments. Such guidance is a vital measure and even re-training for new work can be effected then.

DRIFT OF BOYS INTO CASUAL, MIGRATORY LABOR

Not only does unemployment recruit boys to join the 500,000 casual labor group, but the committee finds that the mechanization

of modern industry, with its resultant loss of skills, contributes directly thereto. In the southern textile mills, this process of bringing in the "skilled machine" has resulted in a very high labor turnover. The committee recognizes here the need of adequate study to be the basis of readjustments in our educational system, and in methods of production, distribution and consumption.

Aftermath of High School Ambitions

While more data are needed, the committee has examined the record of vocational aspirations of 683 California high school youth compared with their occupations 4 years later. About half were continuing their education, but 40 per cent of those employed were in vocations adjudged as good or better, while 60 per cent were in work rated lower than their high school ambitions. Seventy-four per cent had had no specific training for their jobs. Here is a problem calling for further facts and for a guidance program to meet those conditions.

APPRENTICESHIP

We still have 150,000 apprentices or paid young learners. In colonial days it was a widely used educational device; today machinists employ 39,463; building trades, 19,416; railroads, 14,727; printing, 11,603; electricians, 9,562; plumbers, 7,386, etc. Here remains one place where the father's trade is a possible entrance for his son. The committee finds evidence of good results from cooperation between the schools (under Smith-Hughes Law), and the labor or employing groups. Immigration and unemployment have definite bearing upon what the future policy should be. The committee urges further study to determine policy.

Negro Youth

Negro youth constitutes about 10 per cent of our total youth population. Their distribution in industry is shown by census figures:

Industry	Per Cent Negroes	Per Cent All Classes	Industry	Per Cent Negroes	Per Cent All Classes
Agriculture.....	45.2	26.3	Trade.....	2.8	10.2
Mining.....	20.0	33.4	Public Service...	1.0	1.9
Personal Service..	22.0	8.2	Professional.....	1.7	5.2
Transportation...	6.5	7.4	Clerical.....	0.8	7.5

The committee has evidence of: (1) restricted opportunities for employment, training, guidance, or promotion of Negroes; (2) lower wages than are paid whites in the same occupation. The proposal has been made to the committee that a national conference be called to attempt to work out a solution of this perplexing problem.

Chain Store Employees

A Wall Street estimate claims 6,000 chains with 150,000 to 200,000 stores doing one-tenth of the nation's retail business. The first 101 of 500 employees interviewed show an age range of 13 to 23, averaging 18 3/5; and wages from $7–$35 per week, averaging $15.62. Half of those interviewed liked the chain store as they could live at home. The findings will be detailed in the full report.

Lower Mental Levels

The committee has the results of 2,000 cases of vocational adjustment indicating the minimum mental age levels at which girls may be industrially useful. These data indicate that a mental age (Terman Revision Binet-Simon) of six years and four months is essential for the simplest industrial tasks. From that point upward a scale of minimal age for various types of factory work has been developed.

Boy and Girl Agencies and Employed Youth

Most agencies seem to aim at those young people who are in school. The Boys' Club Federation has some 22,000 employed boys members, with records of one-third that number placed in jobs last year and another one-third as members of handicraft classes.

The Y.M.C.A. has 23,672 employed boy members not counting 10,000 more counted in the regular memberships. They have half that number in educational classes and have placed 17,505 boys in jobs and conducted as many more interviews. They have a national employed boys' secretary and a national program.

The Y.W.C.A. serves the employed girl through the residences, vocational, placement, and social means.

The Girls Friendly Society has 7,354 members from 12 to 18 years of age, one-fourth of whom are at work.

The Boy Scouts of America has among its members many thousands of employed boys. It has 5,379 older boys in the Sea

Scouts, half of whom are employed. Its merit badge program has definite vocational values. The Girl Scouts and the Camp Fire Girls in their memberships reach a small percentage of girls who are employed. The Big Brother and Sister Movements, the National Federation of Settlements, the Jewish Welfare Board, as well as the Workers Educative Movements, also are dealing with employed youth.

The committee is impressed with the need (1) of knowing the 15- to 20-year-old group more thoroughly and (2) serving it more fully.

Further Recommendations

We recommend further:

1. Development by States of apprenticeship programs along the line of the Wisconsin law.
2. Prohibition of bicycle riding by messenger and delivery boys on arterial highways, following the principle of making the machine or the situation safe for the young worker.
3. Industrial or technical training prior to entrance into industry.
4. Permanent withdrawal from the labor market, of youth under 16 years, where provided with educational opportunities suitable to their ability.
5. Stimulation of laggard employers to bring up to approved standards, their practices in health, safety, and training features for young workers.
6. A more searching study of the occupational opportunities open to boys of low-grade intelligence, comparable to the study of girls made by this committee.
7. A fuller cognizance, on the part of the boy and girl agencies, of their opportunities to serve employed youth, particularly some differentiation in records which will reveal their disproportionate emphasis on work with school boys and girls.

RURAL LIFE

Any consideration of the education and training of the 18,000,000 youth "outside the home and school," in rural areas, must take into consideration at the outset the things inherent in and contributed by the farm and the open country itself. It is there that many of the great basic things of life are learned.

From the time the country child is big enough to bring in the kitchen firewood, feed the chickens and gather the eggs to the day he drives the team at his father's plow or feeds into the thresher

the gathered grain of the year, he is being educated and trained in the fundamentals and verities of life.

The typical farm home in America is an isolated home, a home surrounded by fields, gardens, orchard, barns, sheds, and pens for the housing and protection of cattle, horses, poultry, and swine, and the storage of feed and grain. The children of the farm family work with their parents and each other in the tasks of the farm and home. These tasks are varied beyond any other human occupation. They vary with the day and with the season, but they are basically educational.

The isolation of the farm, however, limits the farm family in its recreational and social contacts, both to the advantage and disadvantage of the farm boy and girl. It develops individualism, while many of the large accomplishments of mankind come through cooperation.

Limited School Facilities

The rural youth is handicapped too somewhat in his school opportunities. Recent data supplied by the Federal Office of Education, indicates that about 71 per cent of urban children are enrolled in high school, while but 26 per cent of rural children are enrolled in high school. There are still about 161,000 one-room and 20,000 two-room rural schools, while the average school year is about one and one-half months shorter in rural than in urban districts. Teachers in urban schools are usually also of higher grade than in county schools.

Farm Income and Rural Youth

There is not great wealth in farming. About 60 per cent to 70 per cent of farmers make only a modest living, while 30 per cent to 40 per cent have too low an income for an adequate standard of living.

The farm boy and girl early learn the virtues of thrift and the value of an earned dollar.

Because of the modern farmer's efficiency, and because of the use of mechanical power and labor-saving equipment, less people are needed on the farm than formerly to raise all the food and fiber the Nation needs to feed and clothe itself. Consequently, 35 to 50 per cent of the boys and girls of the farm must leave the farm and find employment in other industries. Urban centers

are concerned that this group of boys and girls that come to them from the farm shall be healthy, wholesome and competent.

Organizations at Work in Rural Areas

There appear to be about 120 agencies, exclusive of the church, working with and for children. These agencies do not all have a program that extends into the lives of rural youth, but the large number of different organizations, purporting to carry on a program with youth is staggering. The nearest estimate that can be made from a view of these is that about 25 have an active program for rural youth and not over a half dozen are reaching any appreciable number of rural youth with their program.

Of the agencies operating in rural districts, omitting schools and Sunday schools, the more important may be mentioned as follows: The federal and state cooperative agriculture extension system, which affects each year in a personal way between 3,000,000 and 4,000,000 farm men and women and about 800,000 rural boys and girls between the ages of ten and twenty; the county farm bureaus, which cooperate with Federal, State, and county governments in the above work; the National Committee on Boys' and Girls' Club Work, a private group which likewise cooperates with public agencies in promoting 4-H Club work; the organization known as the Future Farmers of America, composed of about 55,000 boys over 14 years of age and organized into chapters throughout the United States as an outgrowth of Vocational Educational School work, which is a strong potential organization dealing with rural youth; likewise the Boy Scouts of America, which estimates an enrollment of 221,000 Boy Scouts of all kinds from rural districts; the Y.M.C.A., which estimates its work touches youth in about 3,000 rural communities, though no figures are available as to the actual numbers reached in this work. In 106 counties, which covers only part of their rural work, they estimate 111,045 as participating in Y.M.C.A. work; The Juvenile Grange, with an estimated membership of 15,000 from five to fourteen years of age; the Playground and Recreation Association of America, which operates largely in rural districts by cooperation with the Extension Service in training leaders in recreation for rural work. Three men are giving their whole time to this work, training leaders. Among other agencies are the Order of DeMolay, which estimates that about 15,000 of its members are rural boys

sixteen to twenty-one years of age; the Girl Scouts and Camp Fire Girls, which have some development in rural areas; and a large number of other societies and organizations which touch rural boys and girls in one way and another but not in sufficient mass to require mention here.

The 4-H Clubs

Chief among all organizations dealing with boys and girls outside the school and home, and omitting the organizations sponsored by the various churches, is the Boys' and Girls' 4-H Club Work, promoted by the United States Department of Agriculture, the agricultural colleges of the 48 States, and the Territories of Hawaii and Alaska, all in cooperation with counties and farming people themselves.

This is a public organization involving about one-third of the time of approximately 6,000 paid men and women, technically trained in agriculture and home economics; the voluntary assistance of around 60,000 leaders or sponsors of Boys' and Girls' 4-H Clubs, about 17 per cent of whom have been college-trained; and 38 per cent with high school training. It has a membership of around 800,000 boys and girls and costs approximately $7,000,000 annually. It is Nation-wide, reaching into practically every township throughout the United States, and is part of the Cooperative Agricultural Extension System of the United States Department of Agriculture and State Land-Grant Colleges. It is growing in membership at the rate of from 8 to 10 per cent annually.

Of the 800,000 membership, approximately 480,000 are girls and 320,000 boys. About 100,000 of the 800,000 are Negro boys and girls.

There are practically 11,000,000 boys and girls between the ages of ten and twenty in rural America, including villages and towns up to 2,500 population. Four-H Club work in 1929 enrolled about one in each 14 of these.

Boy Scouts

Boy Scout work carries as vital a message for rural boys as for urban boys, and it should be substantially extended into all rural areas. More paid leaders, working wholly in rural areas, are needed. Philanthropists seeking worthy objects for accom-

plishment, may well give consideration to the work of the Boy Scouts in rural areas.

Other Organizations

The extent of the work of all other agencies dealing with rural youth is less than that of the 4-H Clubs and Boy Scouts just described. Most of these agencies called "rural" do much work in small towns and cities up to 10,000 population. This makes it difficult to estimate the actual open country work that they are carrying on. The program of the rural Y.M.C.A. and Juvenile Grange constitute the other major endeavors to offer the rural youth extra school character-building programs. A brief summary of the extent of their work numerically has been given.

Rural Church Activities Affecting Youth

The Epworth League of the M.E. Church, the Christian Endeavor, the B.Y.P.U., and other major youth organizations of the Protestant denominations listed on page 355, have approximately 5,000,000 members, of whom a very small percentage is in strictly open country or rural territory The Mormon Church activities, through their young men's and young ladies' mutual viewpoint associations number a membership of about 100,000 young people, of whom about a third are in rural areas.

Recommendations

From an analysis of the present status of activities of an educational nature affecting rural youth outside the home and school the following recommendations seem warranted.

1. That the program of the Department of Agriculture, the one agency outside the school that is carrying on through its 4-H Clubs a program so far-reaching in affecting the life of rural youth both in an economic and social way, should be expanded until every rural county having as many as 2,000 farm boys and girls 10 to 20 years old has a competently trained, farm-reared man and woman 4-H leader, devoting their full time to the directing and conducting of 4-H Club work. The laws affecting this work should be liberalized to permit of more socialization activities and lend support to the enrichment of the program on the recreational and character-building side.
2. That the Cooperative Extension Service, as a governmental activity, should train its agents in a proper concept of social organization in the broad sense, and that it and the schools

shall take the lead in bringing about a coordination of interests and activities between all agencies working in rural territory.

3. That the rural work of Boy Scouts, Y.W.C.A., Y.M.C.A., Girl Scouts, and Camp Fire Girls should be expanded and coordinated with the activities and program of the schools and the 4-H Club work.
4. That since the educational system of the United States for rural youth comprises not only the public schools, but also the Smith-Hughes vocational schools and the cooperative agricultural extension system, and all are public institutions, each charged with a responsibility in the education of rural youth in its own way, a working agreement and understanding be reached between these agencies.

INSTITUTIONS

The task of our 5,000 child caring institutions in the United States is to stand in the place of a home for their 1,200,000 inmates.

We have over 200,000 dependent children, the tragic product of broken homes and financial want.

The 470,000 physically handicapped include 14,067 deaf; 5,304 blind; and 400,000 crippled young citizens. Then there are 49,791 mentally handicapped, requiring particular adjustment to their environment.

In addition to these groups, we have over 400,000 youth who are found to be delinquent, and whose cases get into the courts. Of these, 75 per cent can be adjusted by adequate probation treatment. Here are something near to 1 per cent of our total population, who with the application of our best modern science, can be aided to develop into useful, self-supporting, self-respecting citizens.

Their care is not only *in loco parentis,* but the institution provides largely their educational, health, play, recreational, and spiritual resources.

The committee has studied the above classes of institutions with respect to staff training, to probation and after care, publicity, finance, plant and structure, and student participation, and has reached two specific conclusions:

1. Personnel and personality are of infinitely greater character and operating value even than plan and finances.
2. The individual student is the unit to be studied, known, aided into a growth into useful citizenship. To this end enrichment of program is essential.

STAFF

In the interests of well-trained and more adequately paid personnel, the committee recommends the furtherance of training projects both within institutions and under established schools. It is felt that higher salaries and more adequate living conditions for staff will be brought about only through consistent and constructive publicity for Boards of Directors and the general public.

TREATMENT

It is evident that a much wider knowledge of the child and his environment is needed in order that individual care and training may be effected. It is, therefore, recommended that every institution obtain the advantage of some professional advice concerning behavior problems and the full or part-time services of a social worker. The establishment of a case committee within the institution (composed of the superintendent and leading staff members) is absolutely essential for any constructive plan of individual care.

A greater amount of student participation in the general institution program is recommended whether it take the form of "cooperative government," "student council," or some less formal program. Sound principles of education bear out the theory that a reasonable amount of responsibility will develop initiative and cooperation to a marked degree.

EDUCATION

The educational set-up of child caring institutions including academic and vocational work is unprogressive and inelastic to a marked degree. It is recommended that the advice and guidance of a progressive university or school be obtained in the educational program and that facilities for various abilities and intelligence levels be developed.

In the interest of preventive and corrective health measures, the active services of a high grade physician and resident nurse should be acquired in every institution for children, and full physical examinations upon admittance and every six months thereafter be established. The cooperation of a neighboring hospital is essential in caring for all serious cases and in the instance of operative work.

Institutions caring for the physically and mentally handicapped child require special equipment for medical treatment as

well as educational and vocational training. An appraisal of existing equipment and advice as to minimum requirements will be furnished by the national organization dealing with the mentally and physically handicapped.

INTAKE, DISCHARGE AND AFTER CARE

There is a great need for well-formulated policies of intake for both private and public institutions insofar as both are concerned, the selection of children for any specific institution must be based upon the needs of the child, other facilities for care in the community, and the equipment and objectives of the specific institution involved.

In the instance of the handicapped child, every school and community must become alert to the need of referring such children to proper institutions or to state authorities for care and training.

The establishment in the institution of the case committee method of studying a child and his home situation with the formulation of an adequate placement plan is emphatically recommended in lieu of the all too prevalent "laissez faire" policy of discharge. Whether after-care or parole supervision is carried on under the auspices of the institution, under the direction of a central agency, or with the cooperation of the court, it is essential that a well-planned correlation be effected between the agencies operating in the community and the institution. It should be noted, therefore, that no *set* plan of parole supervision is recommended, but it is emphasized that there should be a unified plan for each child in the mind of the institution superintendent, in order that removal from the community, institution training and after-care may be a unified and integrating experience for the child.

ADMINISTRATION AND PLANT

The sole high purpose of administration is to control and direct those forces within and without the institution in order that the maximum good may accrue to each child.

Insofar as plant and equipment are concerned, it is recommended that in the construction of new institutions that cottage units designed for not more than 15 children (fewer if possible) should be arranged for the housing of wards. However, in institutions already in operation where the building of cottages is prohibitive, such plans as the division of dormitories, the organizing of large groups into small units and any other scheme to bring

about more individual attention is heartily recommended. Excellent sanitary conditions on the grounds and in all buildings must exist if an institution is to meet even minimum requirements.

In regard to the financing of institutions it is submitted that no institution should exist unless it can give to its wards all the necessary service which they should have to insure reasonable physical growth and personality development. Per capita costs as gathered from the data of approximately 200 institutions range from $200 to $1,700 per year per child. However, it is indicated that a great many institutions which are doing the best work are spending well up to $1,000 per child. It should be noted, however, that it is not how much is spent, but rather how wisely, which is vital in the matter of financing a children's institution.

Conclusions

The institution for dependent, delinquent and neglected children as well as that for the care of the physically and mentally handicapped must assume a new role in the field of social work. In the past it has been a "catch-all"—the place of last resort and the haven of failures. In its new role, it must become a method of treatment, an opportunity for rehabilitation in a controlled environment—a recognized asset in the field of social work rather than a necessary evil. This new order of things cannot be brought about until institutions are reorganized on a sound education and business basis. To this end every State should conduct a comprehensive census of its private institutions and demand that high standards of administration and child care be maintained in all institutions, whether under public or private auspices.

It is likewise essential, if institutions are to reach new levels that they become more alert to the function of other agencies in their communities and attempt to bring about a well-correlated relationship with them in intake and discharge.

The re-vamping of the United States Government Handbook, No. 170, on Institutions for Dependent Children, would be a decided asset to this end, particularly if data concerning institution care of delinquent children be added.

Constructive publicity designed to point out the possibilities and the present accomplishments of institutions and finally *scientific research* for the benefit of institution leaders themselves, will militate toward the development of institutions commensurate with the highest standards of social work.

GENERAL CONCLUSIONS

Forty per cent of the life of an 18-year-old person has been spent "outside home and school." Ever since primitive times, when most of the family's activities and interests centered in the home, there has been a steady seepage of activities "out of the home." The educational values of these activities are now lost to our youth. Almost everything the modern home uses today is prepared for it. Creative activities are disappearing. Even the breadwinners, themselves, have left the homes, returning only at the close of their day's labor. This has meant heavy losses of parental association for the children. What association remains is outside the period of activity in the child's day.

The half of our population in flats, apartments, and multi-family houses in cities over 25,000 further restricts the chance of children in gaining experience in the home.

Further, cities are growing so rapidly that residence areas are constantly being disintegrated by the onsweep of business or waves of new types of neighbors, so that the neighborhood as an interacting unity wanes. It is under such conditions of home and neighborhood apathy toward child activities that delinquency arises. Our annual crime bill is in excess of $16,000,000,000. Our child welfare bill is $5,000,000,000. The crime bill, however, is due to less than 1,000,000 of our population while the welfare bill is for 50,000,000 youth. Every time we "grow" a criminal, he costs us as much as the welfare influence in the lives of 160 normal boys.

The home is our greatest character influencer, but homes themselves are fragile—one in six is wrecked in divorce, while death and desertion play further havoc.

In this situation, with the activities of the home at low ebb, the outside stimuli are multiplying almost inconceivably. With his "inside contacts" reduced, the child encounters an outside world that literally reaches in after him. The daily press, with a paper each day for every other person, brings the world in. The radio clamors at the ear of half of us daily. Transportation shrinks the world—San Francisco is nearer New York today than Trenton was in the days of Washington. There is an automobile for every five people. The telephone conversations total 59,035,000 daily. Everywhere the child turns he finds outside things more numerous, frequently more attractive, reaching oft with zealous commercial motive for his attention. The old institutions of home and church

and school now face new competitions. Among these outside influences are those that are valuable and those that are destructive. Here is a definite field for parental and social concern and careful selective efforts.

We hear considerable criticism of youth. We are unanimously convinced that, in spite of the conditions and difficulties they face, youth today are cleaner, finer, steadier of purpose, and sturdier of character than any generation we have known.

From its investigations, the committee is of the opinion that there appears a real social obligation in arresting and eliminating antagonisms or conflicts between social interests outside the home and domestic interests within the home. The obligation involves the development of leadership in achieving wider expression of citizenship. To conduce to this end, deeper personal concern, more extensive association, and greater sympathy are paramount. This applies both to the social groups outside the home and to the family group within the home.

As a result, benefits will accrue in the form of opportunities for more participation and cooperation of the groups with each other. Group associations of the individual outside the home then can be brought into closer harmony with the family association of the individual within the home. These units, rather than operating in isolation or conflict with each other, will be interacting and complementary.

However, there remains the larger imperative of not undermining the basic and primary units of our associational life. Social agencies owe to the home and the neighborhood a reenforcement, not a separation from them. We recommend then:

1. The wider support of the basic institutions of home and church and school and of these other agencies that also seek to influence character through activities in the outside time.
2. The practical recognition of the individual as the unit of any program opportunity which must be elastic to correspond to nature, and rich in expressive, creative, satisfying values.
   To this end, we recommend that greater personal emphasis be given in dealing with youth so as to develop in them a sense of personal responsibility and accountability as individuals. Organized society, especially in a democracy, requires that each individual be physically fit, mentally equipped, vocationally prepared, and spiritually ready to bear his share as a participating citizen.
3. The re-aiming of programs and the inter-relationships and cooperation between social agencies to reenforce the basic primary social units of home and neighborhood.

SECTION IV

THE HANDICAPPED: PREVENTION, MAINTENANCE, PROTECTION

A. THE COMMITTEE ON NATIONAL, STATE AND LOCAL ORGANIZATIONS FOR THE HANDICAPPED

Child welfare work of today is based upon certain cardinal principles. Among these are:

1. The duty of government to assure to every child proper protection and support and opportunity to develop to his fullest capacity.
2. The further duty of government to safeguard family life insofar as possible from social and economic disorders.
3. The need for an organization of public and private social work that will ensure the early discovery of all handicapped children, and the provision of needed care and individual service, close at hand, for as long a period as the need lasts.
4. The responsibility of government and private philanthropy to provide sufficient funds to meet the needs of all handicapped children in the proper way.
5. The need for a minimum standard of service to which all public and private child caring organizations must conform.
6. The need for a coordinated and unified program of child welfare in every State and community, in which each public and private agency has a definite place.

Noteworthy developments have occurred in the child welfare field showing progress in acceptance of these principles. There has been, for instance, a great extension of public aid to dependent children in their own homes. More attention is being given to the correction of economic and social evils endangering family life. There has been an awakening on the part of local and state government to its responsibility for the welfare of its children, as indicated in the widespread organization of state welfare departments with special responsibilities for children, and in the movement to create better and more comprehensive child welfare service in local governmental units. In many localities there are now attempts to coordinate existing child welfare agencies into a unified program and thus to insure a comprehensive service reaching all children without duplication of effort or waste of funds. These hopeful developments are not however to be found everywhere. The new principles of child care may be generally recognized in theory but they are by no means universally accepted in practice.

There has been a tendency to believe that there can be one panacea for treating children in need of care. This has led to the establishment of a multiplicity of agencies of the same sort, to the exclusion of other kinds of agencies as much, if not more, needed. There has been too great an emphasis on providing care for children away from their own homes. Few agencies have been equipped to prevent or remedy conditions disruptive to family life or hostile to child welfare. Neither have there been many organizations, public or private, to reconstruct families from which children were removed, and to which a great number ultimately drifted back. All children in need of care will not receive the necessary service until there is a more general acceptance and practice of the fundamental principles of modern child welfare work.

FEDERAL GOVERNMENT AND CHILD WELFARE

The American child welfare program from the standpoint of public administration may be likened in form to a pyramid. At the base stand the counties, municipalities, and villages which deal at first hand with the entire range of problems affecting the well-being of children. Somewhat higher in the structure come the state governments with a narrower range of administrative responsibility. Their task is the coordination of the work of the constituent local governments and the promotion of good standards of work among them.

The Place of the Federal Government in a Child Welfare Program

At the top of the pyramid is found the federal government stimulating the States and localities to more effective child care through research, advice, and the dissemination of sound principles. Apart from this advisory service to the States, the federal government has a more direct responsibility for the welfare of children in the District of Columbia, in the territories and dependencies, and on Indian reservations. Whatever may be the differences in the nature of the legal relation between these various governmental units and federal authority, all of them have an immediate claim upon the conscience of the nation as a whole, and are entitled to assistance in safeguarding their children.

Insofar as child welfare presents international problems they can be handled only by the federal government in conference with

other nations or through informal discussion between groups and committees from this and other countries. The importance of international phases of child welfare is growing rapidly as the movement grows to level upwards standards of care and protection for children throughout the world. In the administrative pyramid for child protection, the federal government plays a rôle of vast importance. The extent of its influence is as wide as the nation itself and its prestige is respected abroad as well as in the smallest hamlet at home.

A National Minimum of Child Welfare

It is a distressing fact that the worst, as well as the best of public care for children, will be found among the local county governments of the most progressive State. The general standard of care provided in the States themselves will exhibit the same extremes, upon careful comparison. Indeed there are those who frankly contend that any locality or any State is entitled to "enjoy" unmolested whatever standard of public administration is desired by its people. The difficulty with this theory is that it ignores the "here and now" fate of thousands of children who are growing up in these less progressive places with handicaps of body, mind, and spirit.

These conditions show the need of a leadership on the part of the federal government in defining and promoting an American standard of living and the rights of childhood which may be accepted as a "national minimum." The widespread recognition of such a minimum would affect profoundly the health, happiness, and general welfare of all children throughout the country. The development of standards is an evolving process as new needs and new possibilities appear, and should be carried on by the federal government in cooperation with the States.

It would seem both possible and desirable to establish in the public mind a minimum beyond which any State might rise as far as it will and below which it falls at the peril of common disapproval. The strength and intelligence of children is not a matter of exclusive concern to the State because the general standard of citizenship throughout the country is a question of national importance. It is an axiom of finance that "cheap" money will debase a sound currency; just as surely will a growing body of incompetent citizens lower the vitality and dilute the strength of the American people. Impoverished children will ultimately impair the credit

and efficiency of government from the nation to the smallest village. The problem then is one which affects both the State and the nation and calls for suitable and appropriate cooperation between the two if permanent improvement is to be achieved.

Research, Consultation, and Statistical Service

Under the constitutional limitations recognized as at present characterizing the federal government, the powers of the federal government are restricted to the conduct of research, the collection and dissemination of information, the development of consultation service by which the individual States can be assisted in developing their special services, and sharing the costs of work which meets required standards of proficiency by the use of the grant in aid. A proper administration of grants in aid in this field will be accompanied by an extension of consultative field services, enlarged research activities, and more comprehensive statistical compilation. Until there are statistics concerning the character and volume of dependency, delinquency, and neglect comparable to the data now available on morbidity and mortality, the nation's work for children will be sorely handicapped. The notable work done by the United States Children's Bureau in research is a model for federal activity and such research should be aided and extended in every practicable way.

The establishment of a comprehensive, continuous service to the childhood of the States, territories, and possessions is a high obligation of the federal government, and such assistance and stimulation should be applied to the widest possible range of problems in the most generous way consistent with the interest of the taxpayer.

Grants in Aid

Grants in aid constitute the most effective basis for national and state cooperation in promoting child welfare and in securing the establishment of that national minimum of care and protection which is the hope of every human citizen. Such grants are already an established governmental procedure in this country and have been widely used in England.

The grant in aid system has six distinguishing characteristics:

1. It declares that certain matters, traditionally regarded as of exclusive state concern, are so affected with a national

interest as to justify and require assistance from the federal treasury.

2. While in a remote sense many activities of the State may be regarded as having national aspects, the grant in aid policy selects those in which the national interest is definite, direct, and substantial. Moreover, federal aid is provided for those activities which are not already well developed by the States but which need the stimulus of such aid to insure their initiation and healthy growth.
3. The States are individually and collectively free to accept or reject federal aid and no State is eligible for it until the legislature has declared its acceptance by legislative enactment.
4. The project for which aid is accepted is administered by the State and its sub-divisions. The State must prepare its plan of operation and this plan is subject to approval by the federal authorities. The principal of local administration and control is preserved and the danger of federal bureaucracy is avoided.
5. The initiative of the States is stimulated and their active acceptance of responsibility is insured by the requirement that the States must contribute their own funds in order to be eligible for federal aid.
6. The required approval of the federal authorities for the state plan of operation and their periodic visitation and inspection of state administration provides an effective method for securing the desired national minimum of efficiency. Without jeopardizing local autonomy, grants in aid afford a practicable method of focusing upon local administration the broad experience and expert knowledge of a central authority which is in touch with the whole field of activity throughout the country.

American Experience Under Grants in Aid

A review of American experience under the grant in aid policy discloses that every State has accepted some form of aid and most of the States have accepted all the varied forms of assistance. The total federal appropriations have grown from $8,000,000 in 1912 to $147,000,000 in 1925. Not only have the States matched federal funds, they have exceeded them in every instance. In the case of road building the States appropriate 5 times as much as they receive from the national treasury. Mr. Austin F. McDonald has reported in his book "Federal Aid" the results of his personal inquiry among state officials in every part of the country as to the effect of these grants upon state administration. The testimony

is overwhelming that federal assistance has either been the main factor in starting state activities when none had existed before, or has greatly accelerated work which had been feebly or ineffectively performed.

Grants in aid constitute a governmental technique peculiarly fashioned to the needs of the American people and nicely adjusted to the American governmental structure under the Constitution. This policy is not one to be narrowly construed and suspended at the earliest possible time but should be regarded as a permanent block in our governmental pyramid which should be built upon more extensively as time goes on.

Grants in Aid to Promote Social Welfare

Maternity and infancy aid is of fundamental importance in the social welfare field as well as in the health field. The benefits of such aid should be made available to the territories and dependencies. Grants in aid should be extended to the States to promote the proper care and protection of the dependent, delinquent and handicapped child. The work of state and local welfare boards is of direct and substantial concern to the nation and needs the stimulus and inspiration of effective federal cooperation in the promotion of sound and intelligent citizenship in State and nation. The service of these boards, especially in the more neglected sections of the country, would be expanded and strengthened by a wider application of grants in aid.

It is important that this great governmental policy should rest upon a widely accepted philosophy as to its method and purpose. Grants should not be made in a haphazard and unplanned fashion —merely in response to the pressure of this or that group which may be especially interested in some particular activity for which aid is sought. The whole question needs thorough study and statesmanlike declaration of policy, in the light of which every specific proposal may be considered and acted upon.

THE STATE AND CHILD WELFARE

The State has a distinct responsibility to see that all its children are protected, given proper support, care, and education, and are provided with opportunity so that each may develop to his fullest capacity. In meeting this responsibility States are brought into relationship with the federal government on the one hand and

local governmental bodies and private child caring agencies on the other. It is essential, therefore, that every State have a central authority through which these relationships may be maintained.

State Welfare Departments

A state welfare department, preferably with a division in which will be found the various services needed for the care of handicapped children, is the best means for exercising this authority. Such a department should be found in every State, territory, and possession of the United States. Constructive development of service to children depends upon leadership from a department organized for child welfare and acting on knowledge of conditions throughout the State or territory.

It goes without saying that such leadership can be sound and progressive only if based on adequate data, regularly collected from the local jurisdictions and from all institutions and agencies, intelligently analyzed and utilized as the source from which constructive suggestions can be drawn. The essential importance of records, reports, and statistics, should be constantly kept in mind.

One of the primary functions of a welfare department is the promotion of progressive programs in social work and the establishment of constructive service in communities where there are no social work programs, or where the local program needs strengthening. Moreover it is a sound policy for the State to thrust back on local units responsibility for every kind of service for handicapped children which the local community is able and competent to administer. The state department not only should help to develop these local units but is responsible also for the development of a program for standardizing and coordinating their activities.

Unless the State sets minimum standards below which no so-called child welfare agency is allowed to fall, many children will fail to receive the protection and support to which they have a right. The State alone can do this, and the exercise of supervisory authority is therefore one of its important duties.

The responsibility of the State does not, however, end with promoting social work programs and setting standards of care. Its leadership is needed also in dealing with social and economic conditions which cause many of the handicaps from which children suffer. These are problems of the State, and its duty is to devise means of protecting children from the effects of social disorders.

Forms of State Departments

Prior to 1863, the great body of what is now characterized as public child welfare work was the responsibility of the local official or of the public institution established by the State. The great diversity of standards, the difficulty of securing information, and the need of a state-wide program has led to the establishment in most of the 48 States of a central authority intended to accomplish these and other purposes.

Provision for child welfare in connection with state welfare agencies has had its greatest development in the years since the World War. This development has reached different stages in the 48 States. Eighteen States have reorganized their activities since 1920, several of them adding children's bureaus. Improved methods of administration are receiving attention, and there is emphasis on better standards of personnel. It is increasingly apparent that the success of an organization for social welfare, whether public or private, depends largely on the ability, professional training, and experience of those who carry out its functions.

The early form of state welfare organizations was generally that of continuous supervisory boards of charities, consisting of unpaid members with authority to appoint the executive and to determine policies under the statute. The advantages claimed for this form were that it facilitated deliberation and provided a body of citizens able to interpret the state's activities to the taxpayers and so protected the state's welfare work from spoils politics. However, the statutes under which these authorities were created differed each from the other and the welfare agency in every State assumed a different form, was given different duties, and has developed in different ways, so that at the present time there are substantially 48 different systems of welfare activity, excluding the territories and possessions of the United States.

During the past two decades a number of States have reorganized their welfare boards or departments and created authorities headed by a single executive appointed by the governor, after what is usually characterized as the cabinet form of state government. This is supposed to allow of swifter action and greater efficiency than is possible with a board. It is, however, recognized that this form may fail to provide for continuity in the personnel in important positions, since a change in the state administration may mean an extensive change in personnel.

It should also be noted that no form of organization can ensure freedom from the influences of a spoils system. An increasing understanding on the part of the public of the professional aspects of the work will result in a demand or continuity of service that has proved valuable, offered leadership, and advanced standards. A strong private association, organized to promote high standards of public service, can exercise influence to prevent partisan interference in state welfare work.

Because of these differences in experience it must be acknowledged that no one model can be urged as everywhere most desirable. There is at present a wide interest in the subject of more effective organization of state departments. Under the conditions of present day political organization the continuous board offers greater safeguards than any other form.

Essentials of State Programs of Child Welfare

Some States may provide service to children in more than one department, as welfare, education, health, probation, or mental hygiene, but, wherever responsibility may be lodged, the activities must be coordinated and certain essentials for state welfare work for children must be considered. Some of these essentials are as follows:

1. Every State should furnish leadership in work being done for dependent, neglected, delinquent, physically and mentally handicapped children, and should set standards, promote social work programs, and stimulate protective work for children.
2. Every State should make provision for the care of delinquent and of mentally handicapped children needing institutional treatment, and assure adequate supervision of those children who remain in the community.
3. Every State should secure for physically handicapped children—the blind, deaf and crippled—the medical care, education, and social service that their handicaps require, and should regulate the standards of their care.
4. Appropriations for the state's child welfare activities should be adequate in order to make social legislation effective since mere legislative enactment is not sufficient.
5. A state department should maintain adequate standards in reference to qualifications and size of its staff, in relation to the work undertaken, and to the quality of its service.
6. The state child welfare program should be free from domination by partisan politics.

These requirements involve important relationships of state departments of welfare to other departments in the state government; to local public and private welfare organizations, to the welfare authorities of the federal government and of other States; to the legislature; and to the general public. These relationships should be thoughtfully worked out.

Educational Publicity

A variety of methods may be used in an educational program developing sound social work throughout the State and stimulating agencies to adopt proper standards of work. By conferences of groups of local and state officials and private social workers, by the publication of bulletins, by short courses of instruction, and by intelligent gathering and interpretation of child welfare statistics, the sources and causes of child distress and practicable remedies may be made known. Through such devices it is possible to develop a public opinion which will support an increasingly adequate budget for widening the services of the department, and a broader leadership in formulating legislative programs.

Standards of child welfare that are set by the State should be as enlightened as the progressive and responsible thinking of the community will endorse. They may be formulated through the group thinking and group action of the representatives of child caring organizations and of others in related fields who are called together by state leaders.

One of the most noteworthy developments of state leadership in promotion of social work programs is found in certain States, among which are Alabama, Ohio, New Mexico, that have recognized their obligation and have stimulated and prepared their local public units to accept as full a child caring responsibility as the wealth and population of each unit permit. Since there must be a comprehensive service to reach all children in need of aid, and since this service must be made quickly available near the source of trouble, it is sound policy for a State to urge this need upon local governments.

State Supervision

A state welfare department should have supervision of all child caring organizations within the State, and articles of incorporation

of new child caring organizations should be granted only upon its approval.

The purpose of state supervision is to assure the establishment and maintenance of good standards of work, the setting up of progressive programs, and the protection of the interests of children under care. Most States now have laws providing some form of state supervision or direction of local public and private child caring organizations, but the extent and methods of their supervision vary. The fact that they have such statutes does not imply that they are effective nor that adequate appropriations have been made to permit the enforcement of the existing laws.

All child caring work, whether publicly or privately supported, including public officials and county or local boards dealing with children, should be under the supervision of the State. Where juvenile courts act as general child caring units in addition to their judicial functions, the state welfare department should be given authority to establish for them standards of case work on the same level that is required of other child caring organizations.

The methods of state supervision fall into two general classes: licensing, approval or certification; inspection or visitation. The choice between these methods is relatively unimportant, but it is imperative that the department have sufficient legal powers to make its supervision effective. The leadership and educational duties of the State are, however, more important than the exercise of arbitrary authority.

Many States have felt that they can best meet their responsibilities through the method of inspection and visitation. This requires careful study at first hand of physical plants, methods of administration, and policies of child care in reference to standards set by the department, followed by discussion of the findings with the organizations' representatives. Such a system may be effective in the long run, but leaves much to be desired in the way of quick and decisive action, unless the state department is given authority to make and enforce orders for the correction of unsatisfactory conditions, which will be available in case of emergency and useful where persuasion and recommendations fail.

Other States attempt to exercise their supervisory powers through a licensing system. The issuance of a license must rest upon minimum standards clearly set forth in the regulations of the department rather than upon detailed requirements set by the statute. This method gives an adequate means of controlling child

caring activities, provided it also includes the right to close an organization which definitely refuses or neglects to bring its work up to reasonable standards.

Whatever system is established, it is not sufficient unless it includes an additional program in which the voluntary cooperation of child caring groups is obtained. It must also be safeguarded from possible abuse by allowing for appeal and judicial review of a department's decisions.

There seems to be general agreement in reference to the necessity of some control of maternity homes and hospitals, because of the delicacy of the problems with which such organizations deal and the danger of commercialization in their work. An increasing number of States require licensing of child placing societies. An interesting, new and sound development is found also in those States which require in adoption cases some method of investigation and approval by the department.

The incorporation of all child caring organizations which assume the custody of children is desirable. The requirement that articles of incorporation be granted only with the approval of the department which will supervise their work should prevent the establishment of unneeded organizations.

Interstate Relationships

Every state welfare department should contain a division authorized and equipped to handle all cases of an interstate character, especially those which require agreements with other States in reference to the treatment of children who are to be either returned to or recovered by the state authorities. Greater advances have been made in agreements between States over the care of non-resident mental patients than of other non-resident dependents. This is due largely to the fact that most States have a centralized method of handling the mentally handicapped, but have not developed similar centralization in dealing with other classes of dependents.

These interstate questions of responsibility for support are determined by laws covering settlement which, being part of the poor law or similar statutes, are likely to place emphasis on the protection of the community rather than on the protection of those in need of care. State statutes are sharply at variance with one another and these statutes are often at variance with the interests

of the children concerned. This is repeatedly illustrated in cases of migratory families and of children about whose settlements there is disagreement between States. The lack, too, of any "national minimum" of child welfare work, or even of a minimum standard of well-being for all children, makes interstate problems peculiarly difficult of adjustment. The care of migratory families should be the responsibility of the State rather than of the local unit. Until some far-reaching method of interstate care has been worked out the principles of human welfare should be applied in larger measure than now prevails in certain States.

No far-reaching improvement can come until a uniform settlement law, similarly administered in the several States, is adopted throughout the country, or some federal assistance in dealing with the problem is made available. Certainly sound case work principles must be the basis for treating cases of children about whose settlement there is dispute. These principles involve careful investigation, adequate treatment according to the needs discovered, and a universal acceptance and utilization of some form of transportation agreement, such as has been applied by a limited number of public and private agencies since 1902. (Transportation Agreement of the Committee on Transportation of Allied National Agencies.)

It is recommended that the voluntary association of public officials, organized on a national basis, should consider the problems involved in these interstate relations and should take action looking towards their solution. (American Association of Public Welfare Officials.)

Thirty States now have statutes regulating the placement in foster families of children from outside the State. These laws, primarily intended to protect the States against children who may become public charges through mental defect, disease, or for other reasons, have also provided some protection for the children themselves. Many States now have statutes regulating the placement of their own children, requiring certain methods, standards of work, and reports. Much is needed along these lines to extend to nonresident children the same methods of protection and supervision which are becoming more generally available for resident children.

States that have statutes designed to safeguard children, brought in from other States and placed in family homes, often do not enforce those statutes because of the demands of other duties upon their staffs, and possibly through lack of interest in the problem.

It is very important that state welfare departments recognize that their responsibility for the welfare of these non-residents is as great as it is for children belonging to their own States.

Direct Care

Whatever else a state welfare department may do, it must not slight its important responsibilities for educational work in promoting programs of prevention and protection, for supervising all child caring organizations, and for participating in the settlement of interstate problems. There are, however, certain obligations for the direct care of children which must be met, although the powers and scope of state welfare departments of necessity vary greatly in the different States.

There is now general acceptance of the principle that, in every State there should be lodged in some state department, provision for delinquent children and for mentally handicapped children for whose treatment either the exercise of compulsory power is necessary, or for whose care the equipment and special training required are too costly to be furnished by small governmental units. Most States now have institutions for delinquent children and for mentally deficient children, although nowhere is there yet an adequate, unified program which includes for either of these classes preventive measures, early discovery and treatment, adequate institutional facilities of the training school type, and effective parole.

It is recognized, too, that somewhere within the state's jurisdiction there should be lodged responsibility for providing physically handicapped children—the blind, the deaf and the crippled—with the kind of care and training they need. This may be secured by direct state provision or by local public units, or by cooperation with specialized private organizations. State responsibility has sometimes been lodged in the education department, sometimes in the health department, and sometimes in the welfare department. Wherever it is located, the closest cooperation among state departments is necessary because a physically handicapped child presents social as well as medical and educational problems.

Because of the inadequacy of public poor relief and other local resources for the protection of family life, many States have felt it necessary to accept actual guardianship of destitute and neglected children and have established state institutions or have placed out children in boarding homes, by indenture, or in free homes. With

greater emphasis in recent years on home care of dependent children, expressed through public aid to children in their own homes, and the establishment of protective care under local juvenile courts, a decreasing number of children should be separated from their own families in the future.

There will, however, always be some children who must be given care in institutions or foster homes, but, wherever possible, this should be on a temporary basis and through a local unit. However, community and home conditions will largely determine the length of time for which children must be thus cared for. Where long-time placement at a distance from the child's own home, or specialized training is required which a local public unit cannot provide, a state department may need to supplement local provisions. In States sparsely settled or especially poor in taxable wealth or in private social agencies also, the State may find it necessary to accept the custody of dependent and neglected children, giving them service or support because there is no other agency to provide this care.

In many States that have undertaken this direct care for children, experience has shown that there is real danger of setting up machinery designated for the permanent or long-term care of children, since local units have proved to be over-ready to free themselves from the cost of care by placing the burden on the State. In any case, the State should be notified and have the opportunity to be heard before a child is committed as a state ward. When so committed, the child should be considered as in the complete custody of the State. When the State has received the custody of a child it should make every effort to keep him, while under care, in his own community, and furthermore to return him to his own home as speedily as possible. Whenever a State undertakes to provide direct care for dependent children its standards of work should be, at least, as high as those required of other agencies.

Budgets for Welfare Work

The budgets of state child welfare programs will vary according to the types of work undertaken. The States with direct care programs will need large field staffs and adequate funds to maintain them. Of necessity, child welfare budgets in these States will be larger than in those States with fewer responsibilities. Legislation giving a state welfare department additional duties should

be accompanied by sufficient appropriations to make it possible for the department to undertake the new work. A welfare department should have as much of an opportunity to develop its program as have education and health departments, and it should have financial support in proportion to its needs.

Problems of social need are as likely to arise in rural or isolated communities as in the most populous centers. Leadership and funds for social work, either from private philanthropy or from taxation, are seldom found in isolated communities and therefore the community with least wealth is often in the greatest need of social service. The State may meet the problem of giving care to the individual child, not by assuming all responsibility itself, but by extending money grants to those poorer communities which lack private resources and are unable to provide the needed service from their own tax funds. Financial aid from the State should be granted as a means of establishing local work for children, according to the standards of care and of qualified personnel it sets for all child caring work. It will then give supplementary state care only to those handicapped children whose needs have been proved to require treatment either too costly or too specialized to be furnished economically or efficiently on a small scale. This sharing of costs between state and local governments has been found useful in the education and health fields and should be extended more generally to public welfare.

In any case a State should study its expenditures for welfare purposes to make sure that its money is being spent most effectively and that handicapped children are receiving in service the greatest possible returns on the investment of state funds.

LOCAL UNITS FOR CHILD CARE AND PROTECTION

There is general agreement that some governmental unit should be responsible for seeing that handicapped children are given protective care and, when necessary, support. There is no uniformity in the different States, however, as to which political unit shall act or what form the administering public agency shall take, or of what the "care" shall consist.

Reasons for Local Governmental Responsibility

Children to whom protection is essential may be grouped broadly as dependent, neglected, abandoned or abused, delinquent or wayward, born out of wedlock, physically handicapped, mentally defi-

cient or disturbed. No program is complete that does not include provision for all of these groups.

The same causes seem to lie back of the various social ills from which children suffer. In the large city specializations are necessary, but in rural districts it is most economical and effective for a single agency, and usually a public one, to deal with all phases of family service and child care and protection.

Whatever unit is entrusted with the care of children must be equipped, first of all, with a field service to discover the children who need care and protection, to inquire into their circumstances, and to devise and carry through individualized treatment. Secondly, it must have within itself, or available to it, various types of care, among which must be included provision for family adjustments, with home relief when necessary; protection of, with care and support for, dependent and neglected children; both medical and mental diagnostic and remedial services, with specialized treatment and custodial care for certain types of children. Thirdly, there must be public funds appropriated to pay the salaries of persons qualified by training and experience to deal with the intricate problems of child care, and also to pay for the support of children who need support, either in their own homes or elsewhere.

The county, which is commonly the unit for juvenile courts, is, in most parts of the country, the most practicable unit for the general administration of child care. The majority of problems of handicapped children require study and treatment by an agency which is near by. Only by close at hand service may we expect an early discovery of the case, home treatment whenever possible, and the development of preventive measures after the case has been discovered. To be effective, such services in behalf of handicapped children must be immediately available and should center in the neighborhood of the trouble. The State is too far removed to assume case work responsibilities within the counties, or to influence directly local conditions which are creating dependency and delinquency, or are contributing to physical or mental disorders.

On the other hand, expertness in the field of social service, as in medicine and in any other field, is usually developed only by practice on a sufficiently large scale to permit an observation of comparative results. The township is too small a unit for social service administration, both because the number of causes to be dealt with is comparatively few, and also because the basis of taxation is too limited to meet the necessary costs of the service.

Types of Welfare Units

Whether a county welfare unit should be a unit of child welfare only, or should cover a broader public welfare field is a question which may need further experimentation. On the whole it seems desirable for one administrative unit to undertake all duties within its area which call for social service.

Several methods have been used for carrying out one or more of the various types of service to children such as, an elected public official or board of elected officials, or a juvenile court with administrative powers. Since, as a general plan, the service provided in these ways has proved inadequate there has developed a movement towards establishing unpaid boards of citizens. These boards may have merely advisory duties or full administrative authority. This form of organization parallels the development in the field of education. As boards of education now generally determine school needs, policies, and programs, and administer school funds, so boards of welfare should similarly determine welfare needs, policies and programs, and administer welfare funds.

The most promising form of organization for child care and protection is a county welfare board with administrative authority. The board should be large enough to insure group judgment, but small enough to be a manageable unit, probably with a membership of five or seven. The members should serve without salary and should be appointed for overlapping terms.

To this board should be entrusted the direct administration of an inclusive program of child care, with authority to expend the public funds appropriated for that purpose. It should appoint an executive and staff, whose qualifications should be fixed by the state department of welfare. It should be made responsible for discovering the circumstances of all children thought to be in need, and for determining and securing the form of oversight, support or protection best suited to their individual difficulties.

There is at present a widespread disposition, which is to be deplored, to provide in a local unit only one paid social case worker who is expected to undertake not only a wide variety of case work services to adults as well as to children, but also to develop various forms of community programs. County services of different types, such, for instance, as recreational programs, or correctional work, may be centered in the same administrative unit, but not unless

additional staff with qualifications for the particular additional service is also provided.

In the various States, county board members are appointed by a Governor, by a State Commissioner of Welfare, by a county judge, or by County Boards of Commissioners or Supervisors. If the duties of the county board are mainly those for which the county is the responsible unit, then the appointment should be made by some county authority. If, however, a county board is created principally to assist the State in performing its functions within the county, possibly some state authority may well make the appointment.

However the appointment is made, the welfare of handicapped children will not be handled in a way to insure their individual well being and at the same time the protection of the community, until the administration of child care, no less than that of the public schools, is removed from the uncertainties of shifting political influence.

Personnel

The success of local programs for child care will depend almost wholly on the personal and professional qualifications of the staff. Certain personal traits are essential, as is also a natural aptitude for social service. However, such qualifications without actual training in modern methods of child care or experience in an agency in which such methods prevail, give but limited returns in the social betterment of the community. The initial investigation, diagnosis of the difficulty, prescribing and supervising treatment, should be recognized as requiring the special skill which distinguishes social case work.

A demand for the employment exclusively of residents of the State or of the county seriously limits the quality of service in many localities. Counties should be as ready to employ a non-resident social engineer to build programs for the protection of children as to employ a non-resident civil engineer to build bridges and roads. In any case, training and personal and professional qualifications of workers should be the basis of their selection.

Welfare, Health, and Education

No program for the care of handicapped children can ignore education and health. Every county or locality should have a board of welfare, a board of health, and a board of education, the

three serving the same political unit. The three should be so related and their work so integrated that the full service of each will be available for all handicapped children. No one service should undertake work falling in the province of the others except in general as a temporary expedient.

The combination of school attendance duties with those of social welfare in certain States has attracted wide attention and is not incompatible with good practice. In its larger aspects school attendance is a social problem. Getting the child back in school is not so important as eliminating the cause of his absence, and the discovery and analysis of the situation leading to the absence presents the most promising point for preventive social treatment.

A clear distinction between city and rural territory is necessary when considering the possibility of combining public welfare and school attendance work. Such a combination in cities has not been suggested, but in the more rural areas it is improbable that two separate services with equal standards can be developed. Therefore, in such territory it is important to consider whether or not, under the local conditions, the best results will be obtained through the organization of one service which will cover both fields.

Training for public health nursing and training for social service are so dissimilar that it is not reasonable to consider an amalgamation of the two. The specialized trainings for professional service in these two fields are so totally unlike that the combined responsibility can be successfully carried only by persons having first the qualifications and the full training which each field requires.

A disposition to employ a county nurse, and then to expect her to do the social work of her territory has been found to be fairly prevalent. The nurse in a territory without organized social case work service necessarily must attempt to remedy some of the social conditions which she finds surrounding her patients. Medical results frequently are impossible without social adjustments. However, even were she a skilled social worker she could not extend her social work to the community at large without seriously limiting her nursing service. The danger in such a situation is that where the nurse does some social work the community becomes complacent and assumes she is doing all that is needed.

Both nursing and social service are needed in every local area, and whichever service first enters the field should make it a part of its daily program to educate the community to the need of the

other service. Nursing service and social service are complements of each other and in no sense rivals in dealing with the ills of humanity.

If a common service is supplied by a local unit to two or more state departments, the departments concerned should share in the direction of the work. Only in this way can the relative time to be given to each type of work be determined. Centralized direction is necessary to avoid subjecting the workers in a unit to conflicting supervision and advice from several state sources, and to eliminate the necessity for separate reports from the local unit to the various state departments. Indeed such centralization is sometimes needed within the state department of welfare, and for the same reason.

State and County Responsibility

The county unit should be provided with a suitable field staff and with facilities for case work treatment of all types for handicapped children, unless such children require the long time or specialized care which the county is not equipped to furnish. The question as to whether local or state care is required, should be determined primarily in the local unit, but the State usually does not receive children from the local unit for state care if temporary care only is required. The danger should be avoided of a local unit easily and quickly turning a child over to the State because the State will support him, rather than because the State can more nearly meet his needs. A determination by a county unit of administration that a child is to be turned over to the State for any type of care should be subject to review by the State itself, and when the commitment of a child by a court to the State for neglect or for other cause is contemplated, the State should have opportunity to be represented at the hearing.

Administratively, responsibility should rest with the county for all services to any child until, after substantial case work treatment, such child, for good cause, has been permanently removed from his family, or until a determination has been made that for given reasons he requires the specialized care that only the State can provide.

The local unit, except perhaps in large cities, cannot equip itself to administer or to support certain types of care—as schools for delinquents, institutions for the mentally deficient, etc., clinics for diagnosis of orthopedic difficulties, mental deficiency or disturbance,

and certain other special difficulties. Most localities have but a few children needing these types of treatment, which require specialized equipment and direction which ordinarily can be organized only for a relatively large group of children. The locality, therefore, must look to the State to furnish such service. Diagnostic service, when possible, however, should be brought to the locality instead of taking the children to a centralized state service.

The organization of one agency within a locality to serve both the county and the State in all matters requiring social service, such as parole investigations and supervision and issuing work certificates, seems not only possible but desirable. Combining with case work service non-case-work duties, however, such as licensing and inspecting, presents difficulties which must be recognized and thoroughly considered before adoption, particularly when a limited staff or even a single worker is expected to cover the field.

Need, Not Cost, to Determine Treatment

It should be emphasized that regardless of the type of units now existing or to be adopted, the treatment accorded each child must be determined solely by his needs, and not by reason of what tax unit can be made to pay for the cost of his care. Children are now frequently torn from their families permanently and sent to an institution supported by the State, although home adjustments and relief at local expense might meet the needs; or they are taken into court and declared delinquent so that a county will pay the cost, instead of their being cared for as dependents at town expense. These practices are common and for them there is no excuse.

Transfer of Administrative Duties from Juvenile Courts

In many States the juvenile court has been entrusted with administrative as well as judicial duties, such, for instance, as determining dependency and granting mothers' aid. Such functions belong under the executive rather than the judicial branch of government. Questions of support do not require judicial consideration and the atmosphere of even our most socialized courts is not entirely devoid of association with legal compulsion and wrong doing. The court by very reason of its judicial character is apt to hear of cases only after an extreme situation has already developed, so that the most promising period for preventive work has already passed at the moment the court first hears of it. When

local administrative units of child care are organized, non-judicial duties should as speedily as possible be transferred thereto from the juvenile courts. Relieved of these functions, the courts would be able to deal more intensively and most effectively with delinquent children, and with children who need legal protection. The local administrative unit and the juvenile court are coordinate governmental units, which should work in close harmony.

Equalization of Costs

The vast difference in the wealth of counties, and the likelihood that the poorest localities will require relatively more service and more money for support, makes it imperative that some plan of equalization be adopted so that State and national funds may help meet the costs of county child welfare programs, as they now contribute to the cost of schools.

PRIVATE SERVICE TO HANDICAPPED CHILDREN

The most important development in the field of private child welfare activities today is the interest in community organization and in coordination of effort in behalf of all handicapped children. Group thinking and joint planning, based on the results of research concerning community needs, lead to concerted action for rousing public opinion to correct anti-social conditions, for improving standards of work, for securing more adequate funds for both public and private child welfare organizations, and for proper allocation of services.

Community Programs of Child Welfare

The new instrumentality in the community organization movement is the council of social agencies. Councils usually provide for the participation of all types of social work organizations and most of them have special divisions of child welfare. The advantages of this form of community cooperation are unlimited, but as yet the field has barely been touched. Joint financing of private social agencies through community chests is, as yet, much more common than community engineering provided for through councils. Where these exist, usually in the larger cities, they rarely extend their activities to other than urban areas.

There is likely to be a multiplicity of agencies in populous districts and more private wealth is likely to be available there for

investment in social service. Community planning therefore in such districts becomes a measure almost of self-defense.

The need for group thinking and action in behalf of handicapped children is, however, by no means confined to cities. County and other rural districts are often without the funds or the leadership to deal with their child welfare problems. Instead of having too many duplicating organizations they are likely to be without much necessary service for children in need of care. A progressive state welfare department with educational leadership can influence these situations. Stimulated and supervised by the State, local public welfare units may be organized and these in turn, when properly staffed and equipped, should be the agents to take the lead in promoting a coordinated plan to meet all the needs of handicapped children within their jurisdiction.

The private agency too, has a distinct obligation to recognize the need of an extension of community action and should look to its state welfare department for assistance in planning for a wider community program. Just as the state welfare department has supervisory duties towards private child caring organizations, so the latter have a responsibility for stimulating the state department to take a broader conception of its opportunities and to give the leadership which can come only from the State.

Group thinking is needed on a state-wide basis as well as for local community organization. State programs of child welfare will involve legislation that affects all communities. State welfare departments and state-wide children's organizations must recognize their obligations to promote coordinated programs based on careful study of state-wide needs.

This comprehensive planning may be brought about through state conferences of social work, conferences called by state departments to consider problems common to all sections, and the organization of committees to study certain needs and the methods to meet them.

The Place of National Agencies in a Community Plan

There are a large number of national private social work agencies organized for the promotion of some form of child welfare work. These agencies do not usually deal with the problems of individual handicapped children, but they do affect community and agency programs for them. When a national agency enters the

field it has important functions: to stimulate local interest in and understanding of certain needs of child welfare; to suggest the best methods of meeting the needs; and to standardize the service that local agencies are organized to give.

In carrying out these functions national agencies have a close relationship to a community plan of child care, and a direct responsibility for contributing to a well-balanced program in which local organizations should be encouraged to take part. They also have an obligation to recognize the leadership of state welfare departments in child welfare work throughout the State and the necessity of fitting their own programs to the state-wide planning that may have been undertaken. The national agency not only has an opportunity to arouse interest among local groups in certain child welfare needs, but has also a duty to stimulate state leadership in recognizing problems that have perhaps been overlooked.

Problems of Local Private Agencies

The development of the field of private service does not depend so much upon the multiplication of new agencies as the expansion and enrichment of the program of agencies that may already be in existence in the area. An organization for child welfare that has been in existence many years has generally gained a standing in the community and a stability of program and support that are important assets. It is, however, in danger of being out of touch with modern developments in the field of child care. It is therefore of great importance that those interested in the development of the program should seek to stimulate the old to better service rather than side-track it in favor of the new.

Institutions for child care, drawing their support principally from endowments, have been peculiarly prone to become obsolescent. The need of seeking at least a portion of the support for the enterprise from year to year is a good corrective, and if the board of directors will constantly seek to meet new needs they may be able to conserve all that is valuable from the past and apply it to the needs of the present.

Hitherto the emphasis of private child welfare organizations has been largely on the care of dependent and neglected children away from their own homes. They have often been more concerned with the offering of substitutes for home life than with organizing means to preserve it. There are, therefore, many more institutions

and agencies for the care of children apart from their families than associations concerned with treating family problems as a whole, but good family welfare work is the foundation of good child welfare work.

It is a hopeful sign that there is a much greater emphasis now given by institutions and foster-home societies to the provision of care for children away from their homes only when they have been proved definitely in need of it. Coupled with this is found a greater interest in returning the child to his own family as soon as it may be done wisely. A number of institutions and agencies which formerly concentrated on caring for children permanently separated from their own homes have now reorganized and broadened their services. Child placing societies, which at one time placed children only in free homes for long-time care, sometimes have added protective programs and seek to provide for each handicapped child the particular treatment he requires; and institutions are now often aiding children in their own families or boarding them in foster homes.

Whatever new developments are undertaken they should be based on the individual interests of the children to be served, on the standards of work and personnel satisfactory to the State, and in accordance with the community program of child welfare.

Relationship of Service Between Private and Public Agencies

The problem of the relationship between public and private service has been worked out differently in almost every State in the Union but seems, fundamentally, to rest on the premise that the private agency shall have the fullest opportunity of development consistent with the establishment and maintenance of good standards of work. Generally the private agency has been in the field first. It has given stimulus to the development of public service; it has gathered unto itself a group of devoted men and women who, besides rendering care to the needy children of the community, know the fundamental difficulties and the opportunities that lie in the field of child care.

If public service is to be effective it must count on the participation and stimulation of citizens without which it is in danger of becoming bureaucratic and backward. But private service that is friendly to the development of good public care may provide, through fearless but tactful criticism, that corrective which keeps

public service attentive to its own tasks. The private agency can point the way to service to the few; the public must be in position to apply those principles to the many.

The State is the ultimate expression of the community will and power, and must therefore see to it that the rights and duties of citizens are both protected and enforced. This raises the question of reasonable division of responsibility and service between public and private agencies. Private resources have never been adequate to solve our social welfare problem, and only the State can exercise the police power necessary to achieve social welfare objectives, particularly in respect to delinquent and neglected children. But it is important to keep clearly in mind that citizens have an inherent right, both individually and through associations, to undertake any form of social welfare work which is not detrimental to the interests of the State. Public authorities should undertake only those responsibilities which cannot be satisfactorily fulfilled by citizens themselves, through their own private efforts. The State must always retain the right to supervise the activities of the citizens and must stand ready to supplement their efforts.

If the States were to assume exclusive responsibility for any form of social work, social work would lose the personal service of a large number of its citizens, now freely given, and would cut itself off from large financial resources, which are now available to private social agencies, but which would rapidly dry up if all social work were placed exclusively under public authority.

Where a governmental program of child care is mainly institutional, private effort will continue to parallel it through private institutions, for the reason that the State cannot provide a form of environment and way of life acceptable to all its citizens. Private effort will therefore seek to protect the spiritual heritage of the child through institutional care. A program, directed toward the preservation of a child's own home or the provision of foster home care which conserves the cultural and religious life of the child, will obviate the principal reason for the extension of institutional facilities not suited to each child's individual needs.

Financial Relationships with the Public

The financial relationship between the public and private agency is a perplexing one. There are few parts of the country where appropriations from tax funds to private organizations are not

made in one form or another. There are no accurate figures available to show the total amount thus appropriated or its relative proportion to the expenditures from private funds. It is, however, known to be very large and to support a great number of children.

Various practices exist. Among them are lump sum appropriations by state legislatures and departments, or local fiscal authorities, directly to private organizations; per capita payments by state or local authorities for certain children recognized as public wards; contractual arrangements for services to be rendered by the private agency to the public on a time period basis, or for certain agreed upon items of service.

In times past these public contributions to private agencies were generally for a wider variety of services than is now the case. The States or the local public units are increasingly equipping themselves to provide for the mentally handicapped, the delinquent, or the tuberculous, and, in proportion to the development of their own resources, their payments to private organizations for the care of these classes of children have diminished. The greatest number of children still affected by systems of public payments are the dependent and neglected.

Through such payments, state or local governments have assisted private effort to undertake responsibility for children for whom the public might have had to make provision itself and for whom it might have had to pay the full cost of care. Unless the State had supported through public payments the efforts of private philanthropy, it is extremely doubtful whether the large resources now available for the care of dependent children could be called into existence or could continue to be maintained.

If the public makes payments to private agencies there is danger that the private agency will expect the State to carry more and more the financial burden. If public payments are made they should be given on a per capita rather than on a lump sum basis, and the quantity and quality of service given in return should receive careful consideration. Children paid for by the public should be placed with the private agency only on the authority of the public official, or board, responsible for them, and the term of their stay should be controlled by this placing officer. This presupposes proper case work methods governing intake and discharge, and case work with the family while the child is under care.

Because of the intricacy of these problems, their widespread

occurrence, and their influence on the development of future programs of child care, a further study should be made of the relationships between private child welfare organizations and the public.

SUMMARY OF CONCLUSIONS

The Committee on National, State and Local Organizations for the Handicapped has arrived at certain general conclusions regarding child welfare organization which are based on the findings of the studies and reports of its sub-committees. It presents for the consideration of the White House Conference the following recommendations:

1. There is needed throughout the United States and all its possessions a comprehensive service to provide in every community for handicapped children according to their individual needs for as long a period as those needs last.
2. There should be in every State, territory and possession of the United States a welfare department with special responsibilities for children, and there should be available in every jurisdiction, well coordinated, the various services necessary for the protection and care of handicapped children.
3. Welfare departments should have responsibility for establishing and maintaining adequate standards of care in all child caring agencies, both public and private, and for promoting programs of social work.
4. In every State there should be a system of public administrative units, usually organized on a county basis, to render such services to children as local units are able and competent to perform.
5. The facilities of the federal government are needed to collect and supply information, to offer assistance in the form of investigation and consultation, and to conduct research in the fields in which there are as yet unsettled problems.
6. Both federal and state grants-in-aid, accepted in the fields of education and health, should be further extended in the field of public welfare in order to make possible the development of effective local units of service.
7. Child welfare organizations should be primarily interested in the protection and preservation of family life rather than in offering substitutes for it.
8. All child welfare organizations, public and private, should participate in promoting a unified plan of service to children, since all social effort is one in purpose; each organization should have a flexible program to permit growth and adaptation to changing social needs.

B. COMMITTEE ON THE PHYSICALLY AND MENTALLY HANDICAPPED

There are from 3,000,000 to 5,000,000 children in the United States who are "handicapped"—in the sense in which the term is here used—i.e., children who are blind and partially seeing, deaf and hard of hearing, crippled, who are mentally deficient or disordered, who are suffering from tuberculosis, parasitic, or cardiac diseases.

What is society's obligation to this army of handicapped children? What steps should we take on their behalf? The last decades are witnessing the dawn of a new point of view on this question. Prior to the 20th century, social work was "charity," the principle behind it was to administer "relief," to help the helpless. Accordingly the old attitude held: "These children constitute a social liability. They will always be a burden on society. We must bear that burden. We must do our duty by these children. We must see that they are adequately supported, must relieve, as far as possible, their distress."

But the change in the basic ideals and conceptions of social work which was ushered in by the nineteenth century is making itself felt in this field. Social work's guiding star has become, not relief, but prevention, helping an individual is now held to mean doing everything possible to help that individual to help himself. Social problems are being attacked at their sources. And inevitably the answer to the question as to handicapped children is that: "The handicapped child, like every other child, is a potential social asset. Each and every one, no matter what his background, or how severe his handicap has some gift which he can make to his time and to his community—whether this gift is the priceless one of a genius, like the music of the deaf Beethoven or the inspirational writing of the blind and deaf Helen Keller, or whether it is the performance of those humbler manual tasks, tasks which are inglorious, but which must be done by someone, if the wheels of our life are to keep turning. Our concern then is less how to maintain these children in helpless state, than to see

to it that they never become helpless, to see to it that they take their places in society.

Accordingly, while problems of relief and maintenance are still before those interested in the welfare of the handicapped, their main concern is with such questions as: What are the means of educating the various groups of handicapped? What is needed in the way of educational equipment—as for example for the blind, the deaf; what are the best teaching methods, what administrative provisions are necessary to guard the health of certain groups—as a shorter school day, rest periods, etc.?

One of the outstanding questions concerning the handicapped today relates to their employment needs along lines of vocational training, guidance, placement, and so on. We ask, "Which handicapped persons can enter regular industry, which ones must work in sheltered workshops, which must remain in institutions?" We are concerned today with educating the point of view of the public and of employers regarding the handicapped, trying to overcome prejudices, to break down the wall which has hitherto separated these people from the rest of the world, to make a place for them in industry and in community life generally. The scientific method is being applied to this subject. Research is being conducted into its various phases. The entire field of prevention is of paramount importance today. It embraces the development of facilities for early diagnosis and treatment, the spread of health education, and so on.

The following reports will discuss these problems for each handicapped group. They will show how far we have gone toward realizing this new ideal regarding our handicapped children. They will describe the splendid work which is being done throughout the country—the residential schools which are to be found in every state in the Union, the special classes which are rapidly increasing within our school systems. They will tell you of the teachers who are going out into the homes of handicapped children, also of the ones who are teaching beside hospital beds. They will also tell of the invaluable rehabilitation work which is being done by state boards in all but four of our States, by which thousands are set on their feet each year, will show how nursing work, public health, sanitation, etc., are increasing by leaps and bounds.

These reports must also give the other side of the picture, however, the dark side, and there is, unfortunately, a very dark side of this picture of this nation's care and protection of its handi-

capped children. The reports must tell of the wide areas—largely rural sections which, so far as work for the handicapped is concerned, are a veritable "No Man's Land"—areas where handicapped children, in desperate need of such work, grow up and die without ever hearing of its existence.

Even in cities provisions are still very inadequate. We are in acute need of more special classes for the handicapped, of more vocational guidance work for them, of more research. The highly important field of pre-school work for these children has hardly been touched.

Probably one of the most basic factors in this problem is the attitude toward the handicapped which prevails at the present time. Until the point of view of employers is changed, the door of industry will not be opened to them; until there is more widespread support, there can be no adequate program.

Whatever the group dealt with, it will be seen that the story is much the same. A beginning has been made—the way has been pointed—that is all. The road ahead is long, the work to be done arduous. It involves the rallying and coordinating of all forces interested in handicapped children, the expenditure of a vast amount of time and of energy as well as of money.

FUNDAMENTAL PRINCIPLE AND COMMON NEEDS

The Committee on the Physically and Mentally Handicapped, concerned with the problems of the deaf and the hard of hearing, the blind and the partially seeing, the crippled, children suffering from internal conditions, (cardiac, tuberculous, and intestinal parasites), children with mental health problems, and the mentally deficient, has approached its task with the following fundamental principle:

> Like every child, the child who may have some physical or mental handicap is to be regarded as a potential social asset and not a liability. The handicapped child should be so guided that his aptitudes and abilities may be given the fullest possible development and that his life may become one of usefulness, success, and happiness.

Common Needs

Children who are physically or mentally handicapped are not peculiarly set apart from other children. Their needs in general

are the common needs of all children. They require, however, more intensive application of medical care and of social, academic, and vocational training in order to realize fully their potentialities. Three important needs and recommendations are submitted:

1. The needs of the handicapped should be met by the local community as far as is practicable, and the medical and social care and treatment provided should equip them to participate as fully as possible in the normal life of the community.
2. For the physically or mentally handicapped child in need of temporary institutionalization, the institution should provide treatment, care, and training of maximum effectiveness in bringing about the child's early rehabilitation and restoration to community life.
3. For the physically or mentally handicapped child in need of permanent institutionalization, the institution should provide adequate treatment, well-rounded custodial care, and training which utilize the child's mental or physical abilities to the best advantage during his institutional life.

Preventive Programs

The increasing knowledge of the causes of physical and mental handicaps is urging society on to formulate and develop effective programs of prevention which will insure the child's continuous well being and happiness and promote social efficiency. Such preventive programs should provide:

1. Machinery through which deviations from the normal and the healthful in every child may be recognized as early as possible and proper medical treatment and effective social remedies instituted.
2. Machinery through which the concept of positive health may be promoted and every child imbued with the idea of physical and mental health.

THE DEAF AND THE HARD OF HEARING

Among the 10,000,000 people in the United States whose hearing is impaired to such an extent as to constitute a serious handicap socially, educationally, and economically, there are more than 1,000,000, perhaps 2,000,000 children. To complicate the problem we find that some of these deaf and hard of hearing children are further physically or mentally handicapped by such defects as blindness, feeble-mindedness, and other abnormalities.

Extent of the Problem

The question of what we shall do to ameliorate the condition of the deaf child is a very complicated one, and one that also demands comprehensive research. It involves problems of the physical care of the child in schools, in institutions, and in the home. It involves problems of his education, both general and vocational, and it involves also problems of social training and adjustment.

The period of childhood is of vital importance in the establishment of educational, social, vocational, and personal development. The deaf child, if no special provision is made for him, becomes mute or "dumb" also, since speech is ordinarily learned from hearing the speech of others. Even with the special instruction given in the schools for the deaf, the child makes progress in his general education more slowly than the ordinary child of equal intelligence. The hard of hearing child, often unrecognized as such by his teacher, is retarded in mental development because of his affliction, and thus begins adult life with grave handicaps in addition to his primary one.

This country suffers an enormous economic and social loss from adult deaf persons who through lack of proper training facilities have become to a degree handicapped and dependent. The potential problem of the deaf and hard of hearing children threatens to be still more serious due to the growing complexity of our daily life and the increasing demand of industry for the capable and alert. The waste of ability which threatens us now demands that we supply the facilities for thorough training of the deaf and hard of hearing.

Definitions

While there are one or 2,000,000 "deaf" and "hard of hearing" children in this country, over 17,000 of these are deaf in the technical sense of the term, that is, their hearing is so far gone that it is of little or no practical use to them and they must be cared for and educated in special institutions (schools for the deaf), where they communicate with one another by lip reading, by the sign language, or by finger spelling, and are under the care of teachers especially trained in this work.

The remainder of the great group of children handicapped by defective hearing are able to use their remnant of hearing within various degrees. Most of them hear speech fairly well at close

range, or when the speaker is especially loud and distinct in articulation. But a large number have far more difficulty, and are at a very serious disadvantage in the school room and in social relations. Those children, although properly called "deaf," are more accurately described as "hard of hearing" or "deafened" to distinguish them from the really deaf.

Existing Provisions and Their Adequacy

The schools for the deaf are doing a great work and doing it under heavy disadvantages. But it is nevertheless true that these schools are not obtaining the results that can and should be secured. These schools, in general, need more adequate financial provisions.

Scientific instruments (audiometers and acoumeters) are now available for the rapid and sufficiently accurate measurement of hearing difficulty, and the results of school surveys made with these instruments are indeed encouraging. However, the detection of auditory defects is extraordinarily difficult in the early years of life, and the instruments available for older children are not applicable in this problem.

Special lip reading classes are now provided in 44 city school systems; and 60 cities maintain evening classes in lip reading. In some cases, hard of hearing children need to have all of their regular school work given in special classes under the guidance of teachers trained in work with the hard of hearing. However, the establishment of these special classes and lip reading classes has not been widespread and is only a step of the desired program.

Suggested Program

Auditory defects must be discovered early in life if the maximum treatment benefit is to be gained. The results obtained from surveys involving the use of scientific apparatus have proved of such importance that it is urgent that this measurement be extended to cover every child in the United States. Then and only then can the hard of hearing children be properly classified according to degree of impairment and given the attention and treatment they need. Those surveys should, however, be given an extension much broader than the school systems, as the research recommendations of the National Research Council have made clear.

SCHOOLS FOR THE DEAF

The schools for the deaf could be greatly improved. The curricula should be more inclusive and scientific plans and aims must be established. The investigation on these points included in the research recommendations of the second conference on problems of the deaf and hard of hearing of the National Research Council are urgently needed as a basis for these improvements.

The vocational needs of the deaf and hard of hearing offer problems of peculiar difficulties. Our schools for the deaf in general offer vocational training, but this work is admittedly not well oriented. We must strive to improve the existing conditions, but only after a thorough study of the problem.

TEACHING FORCE

The human material from which an improved teaching force is to be built is of especial importance. At present, the recruiting of this force is somewhat uncertain in its nature: many teachers of the deaf are led into the work because of deafness in their families, others for miscellaneous reasons. The economic inducements, now sadly inadequate, should be so increased that the better type of educational workers will be attracted to this field. Adequate information as to the actual opportunities offered in the field should be distributed among possible candidates.

CURRICULUM

The general educational curriculum for pupils in schools for the deaf is of especial importance. Not only is there lack of agreement as to the nature and balance of the proper curriculum for the deaf, there is also lack of information on what is actually being taught in these institutions. A few schools have issued statements of their curricula, but these are mostly out of date and it is not probable that they represent the actual present curricula. It is quite necessary that a survey of present day curricula should be instituted for the purpose of stock-taking. After the data have been thoroughly studied valuable suggestions might be made.

SPECIAL PUBLIC SCHOOL CLASSES

The hard of hearing child, in the great majority of cases, can receive his education successfully in the ordinary public or private

schools, provided that certain special attentions are given him by his regular teachers, and that special classes in lip reading and in speech are maintained. The number of cities which have provided such opportunities are few and it is urgent that every school system, rural and urban, should make some such provision for its hard of hearing children. The importance of teaching lip reading to all hard of hearing children, and of teaching speech to the deaf and speech correction to the hard of hearing children in the lower grades is specifically indicated.

PRE-SCHOOL CHILD

The pre-school child offers problems the importance of which is being more and more recognized. The problems are especially acute for the hard of hearing and deaf children of pre-school age. Cut off more or less completely from the ordinary methods of acquisition, they enter school retarded, and thus their handicaps are accentuated. Nursery schools would forward the solution of this pre-school problem and would help these children to enter the school systems less retarded.

MEDICAL TREATMENT

The need of specialized medical care for children suffering from auditory handicaps is obvious. But hearing impairments are also connected with general health conditions. Proper medical inspection of school schildren, resulting in adequate provision for treatment, is made possible through the measurements and surveys already recommended.

DOUBLY HANDICAPPED CHILDREN

The problem of the feeble-minded deaf and the blind deaf children is one which does not lend itself to easy solution. While the classes are not large as compared with the total group of the deaf and hard of hearing, they offer special difficulties. Institutions for the blind and those for the deaf are reluctant to assume the responsibility for training the doubly handicapped child, and on application for admission each recommends that the individual be placed in an institution of the other type. It seems clear to the sub-committee that special provisions for the deaf feeble-minded must be made in certain of the schools for the feeble-minded; and, that the question of a central institution for the blind deaf should be

further considered. The provision for the crippled deaf will depend upon the type and degree of crippling.

Research Recommended

As a fundamental step in the formulation of any program for the treatment of the deaf and hard of hearing, research must be carried on in many parts of the field.

1. The results of the vocational training carried on in the schools for the deaf cannot be adequately estimated. A thorough study of these results must precede any attempts toward expansion or improvement.
2. It cannot be doubted that the optimal efficiency in the lines of lip reading and speech teaching has not been obtained. Research directed towards improvement along these lines is urgently needed. Such research requires as its essential instrument scales for the measurement of proficiency and progress in lip reading and speech. No such scales are in existence but are possible of development and are planned in the "Research Recommendations" of the National Research Council. Work directed toward this end should be initiated at once.
3. Intensive scientific study of deaf infants is especially important, not only for the development of better methods for the handling of hypacusic infants in general but also for the contributions which may be made to the fundamental problems of deafness through such study. Hence the establishment of a nursery school, as outlined in "Research Recommendations," is one of the next important projects for the welfare of the deaf and hard of hearing children of the future.
4. Special scales for the measurement of mental capacity and educational progress applicable to the deaf are also needed, if progress in the education of the deaf is to be made. Scales developed for ordinary children are not satisfactory for this application for obvious reasons. The present difficulty in distinguishing the deaf child who is feeble-minded from the child mentally retarded merely on account of his deafness is one illustration of the need for such measures.
5. Amelioration of the condition of the child of impaired hearing is of great importance. Still more important would be the prevention of the condition, so that no amelioration would be needed. Proper medical care of the individual cases can do much, and improvement in public health work has a considerable prevention value. Yet much remains to be learned before a large reduction in the total number of cases of inadequate hearing can be accomplished. Physiological and patho-

logical studies of the ear and ear conditions must be fostered and extended. The different types of deafness must be classified and studied, and the influence of racial, climatic, and occupational factors (if any) must be determined. Intensive studies of the nature and conditions of the inheritance of deafness must be made. To these ends the surveys of school children and of adult population, by the use of instruments and techniques adequate to measure the hearing capacity, are fundamental needs.

THE VISUALLY HANDICAPPED

(Blind and Partially Seeing)

The handicap of blindness or of low vision is no longer regarded as an insurmountable barrier to achievement. Nevertheless, a child thus burdened is at a great disadvantage compared with others unless he receives a specialized training designed to offset his physical limitation. Education for the visually handicapped is compulsory (as it should be) in most States. It behooves the States, therefore, to provide an education which will meet their needs when, as adults, they must enter the social and economic world of the seeing.

Since the requirements of the blind and of the partially-seeing child differ considerably, it is essential that the distinction between them be kept clearly in mind. A child is considered blind if he is totally without sight or if his vision is so defective that he cannot or should not use his eyes as the chief medium for obtaining his education. A partially seeing child is one with defective vision who can be taught through the eye rather than through the finger, but who cannot or should not make extensive use of ordinary print.

Only the roughest estimates can be given concerning the number of visually handicapped children since no census has yet been able to obtain uniformly accurate records throughout the country. For the blind, the best estimate would seem to be that of 15,000; for the partially-seeing, 50,000. However, these figures are open to question.

Existing Provisions and Their Adequacy

Of late years great advances have been made in the education and training of visually handicapped children, and individual States, cities, counties, and schools are meeting their obligations in a highly satisfactory manner. Nevertheless, educational facilities for blind and partially-seeing children in the country as a whole are

not commensurate with the need. In schools and classes for the blind only about 5,900 children are being educated, of whom not more than 425 are in day school classes. It is certain that some of these might more properly be assigned to sight-saving classes. Thirty-nine States support 51 schools for the blind, including the schools for colored children. Of these 51, a third are dual in character, that is, are for both the deaf and the blind. There are also 10 private schools, among them some of the most important residential schools in the country. Although the present number of residential schools is quite sufficient, many of them need to have their staffs increased and improved, and their facilities extended as soon as funds can be made available. Because of the importance of reasonably safe but active physical exercise many items which might seem extravagant in other publicly supported schools are essential here—swimming pools, for instance, skating rinks and good gymnasiums. As yet few schools can boast adequate play equipment.

In only 19 cities do the school authorities provide braille classes for the blind children coming under their jurisdiction. Some of these cities have safeguarded the interests of the children by putting the classes either under a special supervisor or under one genuinely concerned for their future welfare. In other cities, however, there is room for improvement in the matter of supervision. One problem which is not always adequately solved by braille class departments is that of guaranteeing to all of the children stimulating and constructive activity outside of the regular class work.

There seems to be no adequate reason why braille departments should not be established in more large cities, and in some States such classes would go far toward relieving the pressure on the state schools.

In both residential schools and braille classes the value of kindergarten work for the development of motor coordination and for hand training do not seem to be appreciated although a few of the schools have exceptionally good training of this sort.

Sight-saving class instruction is furnished by 93 cities having a total of 348 classes. There are also two classes in counties, demonstrating what can be done for partially-seeing children in semi-rural communities. However, less than 5,000 children are served by these classes. For the others, especially those in rural communities, little has been accomplished. Whether they are sent to schools for the blind or are allowed to trail along in the regular

grades, they are likely to be educational misfits. Although there is a fairly encouraging growth indicated in the number of sight-saving classes established in elementary schools, the work is now at a stage where a considerable number of graduates require advantages offered by junior and senior high schools. To some extent such opportunities are offered ranging from actual classes established to the providing of advisers and student-readers, but in altogether too large a number of communities no such provision is made; hence much of the value of the special education provided in the elementary school does not result in the greatest attainment.

With few exceptions the salaries of braille and sight-saving class teachers are higher than those of regular grade teachers in the same systems, although the differential is seldom commensurate with the added training necessary and the added responsibilities imposed. In residential schools, the usual policy of paying part of the salary in the form of board, room, laundry, and so on, makes comparison with public school salaries unreliable. It is probably safe to say, however, that few residential school teachers receive more than would be paid for corresponding work in the public schools; many of them receive markedly lower compensation. In regard to training requirements and salaries, we have much to learn from countries like England and Germany. In these countries a centralized educational system makes possible a standardization of required training and of salary schedule which are sufficiently high to give teachers of the blind an enviable prestige in the profession.

The per capita cost of educating braille and sight-saving class children is admittedly higher than that for children with normal sight in the regular grades, and properly so. But this extra cost is insignificant compared with what it would be if these children were allowed to become illiterate public charges unable to contribute in any way to society because of their lack of training.

For a number of years there has been much discussion and some experimentation concerning the vocational guidance and placement of young blind people, but discouragingly little headway has been made in this country toward solving the serious problems involved.

For partially-seeing children the vocational question has so far received scant attention. This is partly because many of these students are given employment as full-seeing people, and partly because only now is there beginning to be a sufficient number of graduates to call for special consideration.

Educators and placement agents are of late giving more attention than formerly to personality factors in placing their visually handicapped pupils and some are taking steps to correct whatever shortcomings they can through recourse to psychiatric and psychological service. As yet such a practice is not the rule.

In the allied field of prevention of blindness, striking results have been achieved, especially in the reduction of ophthalmia neonatorum (babies' sore eyes). In 1907 this infection accounted for 28 per cent of the new admissions to schools for the blind; today this has been reduced to 9 per cent. Likewise, because of aggressive measures recently inaugurated against trachoma, juvenile blindness from that cause promises to be largely eradicated. Such reduction of preventable blindness not only saves the sight of many children but in doing so leaves room in the schools for others, unavoidably blind, to whom an education might otherwise be denied.

Recommendations

From the investigation of the Visually Handicapped, the following recommendations are submitted:

1. In order that blind children may develop as normally as possible it is urged that the care and training of pre-school blind children be subjected to careful study, with special emphasis on the following: (1) The value of the nursery home for blind babies; (2) the adequacy of the visiting teacher or nurse in urban and rural communities as a substitute for institutional training; (3) the value of play materials now in existence and the invention of new ones designed to take the place of visual stimuli for seeing babies; and (4) the means for preventing objectionable mannerisms and for curing those which have already developed.
2. So far as increased educational facilities for the visually handicapped are concerned, it is recommended that: (1) The establishment of sight-saving classes be encouraged in both elementary and secondary schools; (2) the establishment of braille classes be likewise encouraged; and that (3) an effort be made to provide for sight-saving and braille classes such supervision as will insure adequate protection of their interests.
3. In order that blind children may be at least as well equipped scholastically as other children it is recommended that a study be made of their special educational needs throughout the twelve grades. In connection with this study particular attention should be given to the adequacy of present educational facilities for blind colored children.

4. In order to further the normal social development of blind children it is urged that a committee be appointed to study the possibilities of training for social intercourse, and to present suggestions which may serve as guides to educators and parents.
5. Because of the vital importance of a well-poised, attractive personality to the future success and happiness of blind children, it is urged that steps be taken immediately to establish a psychological service available to organizations for the blind throughout the country, the duties of which will include those of clinical service, study of personality problems, vocational, and educational research of a psychological nature.
6. It is recommended that a committee be appointed to foster experimental work on the vocational guidance, training, and placement of blind and partially-seeing people, and to include representatives of employers' organizations, of the American Federation of Labor, of placement workers, and educators concerned with the care and training of the blind and the partially-seeing.
7. Owing to the increasing number of blind people attending institutions of higher learning and to the serious special vocational problems facing them, it is urged that a careful study be made with a view to discovering ways of assisting these blind people in finding more satisfactory opportunities for employment.
8. It is urged that a more adequate provision be made for the training and after care of the deaf-blind. The United States has lagged behind the more progressive of the European countries in meeting the needs of this group.
9. Since the presence of extremely backward children in residential schools for the blind is detrimental to the best interests of the normal and superior children, it is suggested that a committee composed of administrators of schools for the feeble-minded, of medical specialists, of psychologists, and of heads of schools for the blind, be appointed to develop a workable plan for caring for this group of children.
10. That the professional status of the work for the blind may be raised, it is suggested that a committee be appointed to prepare a set of minimum standard requirements for entrance into the different branches of the work and to suggest ways of attracting to the field the highest calibre of workers.
11. For the purpose of clarifying nomenclature regarding causes of blindness and degree of blindness, it is suggested that the Committee on Central Registration of the Blind which is sponsored by organizations for the blind, and which is already considering this question, be urged to present its report as soon as possible.

12. When a simple and practical classification has been provided, it is recommended that the Federal Census Bureau sponsor a census of the visually handicapped which will afford a more complete picture of the extent of the problem as it exists in the country as a whole.
13. Because of the present lack of exact knowledge regarding the condition of visually handicapped children and the facilities for their care, education and training in the territories and dependencies of the United States, it is recommended that a survey be made which will divulge the extent of the problem and the adequacy of existing provisions.

The final recommendation of the Sub-Committee on the Visually Handicapped is that all committees which may be appointed shall be required to report their progress at the end of a reasonable period of time.

While this brief report is offered in the full realization that it does not present a comprehensive picture of the field as a whole, the recommendations given here stress those points about which there is at the present time the greatest consciousness of need among workers for the visually handicapped. It is earnestly hoped that steps will be taken immediately to put into operation machinery for carrying out the suggestions prepared by the sub-committee.

THE CRIPPLE

The movement in behalf of the crippled child in the United States has recently become closely allied with the newer developments in medicine, orthopædic surgery, public health, social welfare and education. It occupies the attention of more volunteer and professional agencies than any other type of child service. In spite of this fact, there is as yet little definite knowledge of the numerical extent of the problem.

There is a tendency to conceal crippled children and to avoid deformity. Because of this fact a peculiar psychological situation arises to hinder the solution of the problem. It also makes the discovery, care, and education of the cripple socially urgent, particularly in isolated and sparsely settled communities. Investigations have proven that there are enough such handicapped children in each State and many smaller communities to warrant the provision of special facilities for their care.

POPULATION RATIOS

Surveys indicate an average of 2.5 cripples under twenty-one years of age in every 1,000 of the population. About one-third of these are in need of special education. Wide variations in ratios create some danger in using the average ratio in making estimates. Differences as great as 9.79 to 0.10 in the general population and 18.7 to 1.19 in the school population are on record.

Using a ratio of 2.5 and the 1920 census the estimated number of crippled children in the United States is 289,919. If the average ratio of 3.00 is used and the 1930 census, the total estimated is increased to over 365,000.

EXTENT AND ADEQUACY OF FACILITIES

It was found practically impossible to secure by correspondence a complete record of institutions, hospitals, schools, special classes, and other agencies dealing with crippled children. Judging comparatively with the national surveys of 1914 and 1924, the information assembled in 1930 is sufficient to indicate that the movement in behalf of crippled children has been progressing with an acceleration that is encouraging, even if the end results are far from satisfactory.

The number of beds in use for crippled children in children's and general hospitals, while difficult to determine because separate facilities and records are not generally maintained, undoubtedly has made the largest increase in the past five years. This is probably due to the development of decentralized state programs for cripples. The increase in convalescent beds ranks next. Practically no change is noted in the capacity of custodial institutions. A very marked yet inadequate development is taking place in the field of special education through the public school system. Possibly the greatest recent advancement has been made in the spread of clinical and rural diagnostic facilities. Several States now provide for such clinics by statute. A partial list of diagnostic centers and rural clinics reported over 125,000 orthopædic examinations made in 1929.

The present facilities for constructive and complete care for all the cripples in the United States are far from adequate. Nearly 4,000 crippled children were reported on hospital waiting lists. Commonwealths having well-established complete decentralized pro-

grams of care have few or no cases on these waiting lists. A number of States have no facilities but send a few cases elsewhere for treatment.

It is not believed that the present inadequacy in facilities calls generally for the building of additional orthopædic institutions. The deficiency may be met satisfactorily, more economically, and with greater social justice by creating a program in each State to: (a) Coordinate the efforts of interested agencies; (b) use existing facilities; (c) safeguard the services rendered; (d) pay the costs from public funds; and (e) fix the administrative responsibility in appropriate departments of the state government.

DEFINITION

Statistics relating to crippled children, upon which ratios and legislation have been postulated, have been and are misleading, partly because there is no generally accepted definition of the term "crippled child."

This study has been concerned with two groups of crippled children under twenty-one years of age:

(1) The orthopædic cripple who, because of congenital or acquired defects of development, disease, wound, or accident, may not have complete control of his body or limbs;
(2) The handicapped child needing plastic surgery for defects such as harelip, cleft palate, severe burns, and so on.

Aims, Purposes and Methods

The aim in a complete social and educational program for crippled children should be to treat crippled as normal children insofar as it is possible. To do so, however, involves specialized services all along the line of activity, which must be coordinated continuously.

Potential causes of crippling should be discovered in order to remove completely as many handicaps as possible. When cure is impossible, a program of after-care must be afforded. The waste entailed by orthopædic surgery without adequate after-care, including plans for educational and placement services, has been one of the tragedies in the story of the crippled child. There is no phase of social activity in which work must be carried on unremittingly over such a long period of time as in the orthopædic field.

The purpose of activities in behalf of crippled children is in the final analysis to produce self-supporting citizens. Therefore, there

should be in all schools which they attend a system of vocational counseling carried on in cooperation with teachers, medical advisers and parents. The problems of the later adolescent and early adult years are more acute and less adequately provided for than those of any other age group. It is here too, that the hazards are greatly increased by the psychological and emotional experiences arising from physical limitations and the public attitude toward deformity. The whole program of the cripple meets its test at this point. The method of procedure all along the line of his care must be made to meet this situation when it arrives and thereby place the cripple ultimately in appropriate remunerative employment.

The methods of procedure followed by the established agencies in the fields of medical, public health, social welfare, educational and employment service have not met the problem of the cripple in its entirety. Their results have been inadequate until the problem has been presented to these several agencies specifically in all its phases by organizations working wholly in the interest of the cripple, and until a coordinated working program has been established.

Legislation

It is through the efforts of agencies working wholly in the interest of the cripple and certain of the civic and fraternal organizations that public opinion has been awakened to provide legislation in the interest of the crippled child. Since 1897 more than 100 such laws have been passed by the several States. Some of them jointly concern other types of handicapped children and adults. In most States in which complete or adequate programs are now functioning, private organizations have continued to sponsor work done for cripples through public sources. Two of the most recent interesting and constructive provisions of state laws for cripples relate to: (1) Special tax levies to insure continuous working funds; (2) administrative commissions authorized to enforce and coordinate the various acts of the legislature.

A Complete State Program

The problem of the crippled child is fundamentally the responsibility of the State. It was once thought that a centralized state institution was necessary to solve it. Legislation creating city, county, or district orthopædic and special school centers have pointed to another and more recent solution. In such a program

all necessary services may be coordinated. It makes possible greater use of all orthopædic surgeons and existing facilities. State-wide private agencies are now promoting and sponsoring such legislation.

A complete state program for cripples includes a definite plan to:

(1) Continuously locate them promptly.
(2) Provide early expert orthopædic and medical diagnosis.
(3) Secure high quality medical and surgical care, as near the homes of cripples as possible.
(4) Provide the several special therapies, after-care and follow-up services and the training of parents of crippled children.
(5) Obtain adequate appliances and braces at reasonable costs.
(6) Furnish special education in the regular public and private schools, special schools and classes, hospitals, and family homes.
(7) Insure adequate vocational guidance and training.
(8) Place cripples properly at employment.
(9) Cooperate in all efforts to prevent the causes of crippling.

Such a program is now developing in a number of States. It seems essential even if a State has already provided a centralized institution. This is one of the most interesting conclusions of the New York State Survey. No two States can be expected to use identical programs. Each must be worked out in keeping with existing conditions, circumstances and facilities. In the smaller States with dense populations all of these services may be made available through the in- and out-patient services of a centralized institution cooperating with appropriate departments of the state government.

CONCLUSIONS AND RECOMMENDATIONS

A legal method should be adopted in every State to find all crippled children, coordinate the work done in their behalf and provide ways and means to bear a part of the excess costs arising from their care and education. The State should safeguard the quality of service rendered. Programs for crippled children should recognize the right to an equality of opportunity. Facilities should be made available to them regardless of their financial circumstances or place of residence. A scientific plan for the placement of crippled children in employment, as they are trained, should be developed. It should be properly coordinated with the Federal-State Vocational Rehabilitation service. A central administrative service should be established, through public or private agencies

(or both) to stimulate, coordinate and supervise all the various local, private, and public efforts made in behalf of cripples in each State.

It is quite clear that very much more effort is being expended on the salvage of crippled children than upon the prevention of the causes which disable them. No evidence is available to show that the standard ratio of cripples for the whole country is being lowered to any marked degree. It is generally recognized that it is very difficult to initiate a constructive working program of prevention. In each cause of crippling a special and different method of procedure seems to be required. Most of the available funds too, are needed in the work of salvage. Agencies dealing with cripples should develop definite plans to cooperate in the research and activities dealing with prevention and to make the publications on the subject authoritative and national in scope.

It would seem important for the White House Conference to find a way to continue the study on facilities, appliances, employment, costs, accomplishments, results, and the possibilities of prevention. An exhaustive study of end results should be made in at least four States representing different types of programs. It is recommended that the Conference call together representatives of the laymen's groups interested in handicapped children, of the national agencies dealing with the blind, deaf, cardiac, speech defectives and the orthopædic cripple, and of industry for a special study relating to cooperation, employment, and prevention.

Definite plans of procedure should be made to eliminate a great deal of duplication of effort and thereby unnecessary expense.

The system now working in a few States, whereby it becomes somebody's business to discover the proper leadership in work for cripples and assist in establishing constructive programs administered by trained persons, should be extended to all States.

How to Proceed

Experience indicates that state societies for crippled children, when adequately supported, are practical agencies for building and sponsoring constructive programs for cripples. Such organizations should be encouraged. They bring to all crippled children a proper equality of opportunity through cooperation. They can:

(1) Coordinate all interested efforts in a State.
(2) Stimulate public opinion to request proper governmental action.

(3) Join in efforts to prevent the causes of crippling.
(4) Stabilize the work of governmental agencies.
(5) Use promptly the final recommendations of the White House Conference.
(6) Cooperate with all properly interested agencies in securing any needed assistance from the federal government which may be legal, necessary, and proper to insure to all cripples in the United States an equality of opportunity which will help them to help themselves to become self-supporting and self-respecting citizens.

INTERNAL CONDITIONS

In this report the term "internal conditions" is restricted to include only three classes of handicaps which occur frequently enough among children to warrant special consideration, namely:

I. Tuberculosis
II. Heart Disease
III. The intestinal parasites—hookworm and ascaris

TUBERCULOSIS

Prevalence and Distribution

Various studies and investigations on tuberculosis in children, made in various parts of the United States of America, reveal facts such as the following:

1. That the incidence of tuberculosis infection among school children has been found to vary from 10 per cent to 90.2 per cent in different cities and States, depending upon the opportunity for exposure to tubercle bacilli.
2. That the incidence of tuberculosis as a clinically manifest disease among school children varies from 0.5 per cent to 3.5 per cent.
3. That the incidence of the "childhood type" of tuberculosis increases so as to become the prevailing type during this age period. The adult type is more common among adolescents than among younger children.
4. That the death rate from tuberculosis in the "teen" age group has not declined in the last decade as rapidly as at other age periods, nor as rapidly in girls as in boys of this age.

Protection

This committee wished to emphasize the fact that two types of tuberculosis exist in childhood, and that the treatment of the

two types is quite different. The treatment of the childhood type is aimed toward protection of the child himself. In the adult type, the possibility of infecting others must be an additional consideration.

The fact that clinical signs are not sufficiently definite to distinguish the so-called "childhood" type of tuberculosis is now finally accepted, and diagnosis must be made through the use of special skin reactions and X-Ray plates.

In the adult type of tuberculosis, which becomes more common in the adolescent age, the symptoms can be detected by the usual clinical examinations by the physician, which are usually substantiated by X-Ray.

MEDICAL PRINCIPLES

The underlying medical principles involved in the protection of tuberculous children include:

1. Early detection.
2. Early provision for adequate medical service.
3. Medical care to include:
    a. Restriction of activity for conservation of strength and prevention of undue fatigue.
    b. Provision of adequate nourishing diet.
    c. Maintenance of personal and environmental hygiene.

There appears to be a growing tendency to place greater confidence in restricted activity and increased nutrition rather than the undue emphasis hitherto placed on air and sunlight, without in any way detracting from their values.

The specific recommendations for protection and care of tuberculosis must be decided by local conditions, but the medical principles here outlined should be recognized, approved and adopted everywhere in the work if it is to succeed.

PRESENT SOCIAL AND MEDICAL PROVISIONS FOR PROTECTION

The American Medical Association Report for 1928, which is the latest issued, gives a total of 508 hospitals devoted to tuberculosis with a total of 62,113 beds and 25 bassinets. This report covers every state in the Union. In Hawaii, the Philippine Islands, and Porto Rico, there are a total of 1,042 beds for tuberculosis contained in six hospitals. Porto Rico with a single hospital, containing 30 beds has 1,500,000 population, where Hawaii with less than 350,000 has 14 beds and provides for 4 hospitals and 812 beds. Similar

discrepancies are seen in the United States. Alabama, with 2,500,000 population, has 4 hospitals and 224 beds, whereas Arizona, with less than 500,000 population, has 24 hospitals and 1,828 beds devoted to tuberculosis. Five hundred eight tuberculosis hospitals containing 62,113 beds have an average percentage of 80.3 of the beds occupied and an average number of patients of 49,877 for the year 1928.

The decrease in patients to the same number of hospitals available indicates a lessened demand and probably reflects the general lowering of the tuberculosis incidence or rate among the whole population. It may be the general hospital for tuberculosis is reducing the number of patients in each special tuberculosis institution. The exact number of tuberculosis cases in hospitals or in hospital departments of institutions is probably equally great.

The American Medical Association Hospital Report states that the use of general hospitals for tuberculosis has been proved entirely feasible with proper care and technique, and it is economically preferable in certain instances.

The report of Section I, Committee C, will give the total number of hospitals devoted to the care of children and the number of beds contained therein and in other hospitals.

For active cases of tuberculosis, the sanatorium is probably one of the best places yet provided, if it be regarded and used as an institution of training and instruction, where the benefits to be derived from such a regimen are demonstrated to the patient himself, so that he may later return to his home, or to some place outside of the institution, with a better understanding of his condition and the ways in which it may be best cared for.

The physician should determine which of the many types of treatment should be most effective in the individual case in a given community. Whether open-air schools, day camps, open-air camps, sanatoria, or the like, are to be used shall be determined by the local needs. All of these provisions appear to have their place and to be effective under proper conditions.

The subject of state and local organization and administration comes properly under Section IV, Committee A.

Prevention

Active immunization against tuberculosis is still in the experimental stage. In view of this fact we must depend entirely on

general measures for prevention. The medical principles involved in the prevention of tuberculosis include:

1. The early detection and segregation of cases for the purpose of preventing transmission of the disease to children by infected persons.
2. Personal hygiene.
3. Sanitation of environment, such as housing, milk supply, water supply, waste disposal, and so on.

The medical preventive principles must be recognized and put into practice by all social and health organizations. The private practitioners of medicine must specially emphasize these principles and see that they are put into practice.

PRESENT SOCIAL AND MEDICAL PROVISIONS FOR PREVENTION

In Circular Number 6, May, 1930, of the Educational Research Service, Department of Superintendence, and Research Division of the National Education Association in Washington, studies made in 23 large cities, ranging in population from 158,000 up to 2,000,000, are presented. There was an enrollment of 4,831 pupils in the open-window classes, of which there are 180, and an enrollment of 2,799 in open-air classes, of which there are 76 in these 23 cities. Provisions for social and medical care in prevention of tuberculosis will be dealt with by Section IV, Committee A.

HEART DISEASE

A study of statistical data available from special studies on school children in selected areas reveals some facts as to the prevalence of heart disease according to type of disease, age, nationality, etc.

Prevalence and Distribution

Figures generally accepted, and determined by intensive studies on large groups of children, chiefly in the school age, place 0.5 to 1.5 per cent of children among the five functional classifications of cardiac involvement generally recognized. In school children the figure runs less than one per cent in the most reliable studies, such as were made in Boston, New York, and Philadelphia public schools. There are approximately 45,000,000 children under 19 years of age in the United States (1920 census) and one per cent would indicate that about 450,000 children in the United States

need supervision and periodic examination and advice to get the most out of life in spite of their potential or real cardiac limitations.

Protection

The medical principles underlying protection of heart disease in children are:

1. Early detection.
2. So ordering their lives that they can carry on activities as nearly as possible in a normal way. This implies the establishment of a regular regime for each child under continuous medical supervision with intelligent cooperation of child, parent, teacher and all others who come in contact with the child handicapped by heart disease. It applies to the home and to the school, depending on the age of the children considered.
3. Adequate protection of the child with heart disease involves mental as well as physical care.

The specific recommendations for protection and care of heart disease must be decided by local conditions, but the medical principles here outlined should be recognized, approved and adopted everywhere in the work if it is to succeed.

PRESENT SOCIAL AND MEDICAL PROVISIONS FOR PROTECTION

Studies on the distribution of medical and social service available to care for these children with heart disease come within the scope of work of other committees. The Committee on Medical Care for Children has made an extensive and intensive study on the subject of available medical services for children, including medical social service.

Prevention

The medical principles underlying prevention of heart disease in children are:

1. Avoidance of infectious disease.
2. Convalescent care sufficiently prolonged to allow full restoration of functions and full healing of the pathological process before an ordinarily active life is resumed.

These principles should be understood and put into practice by all individual physicians and nurses in private practice in homes or institutions, as well as by all organizations, health and social agencies, official and unofficial.

Education for prevention of infectious disease and for proper convalescent care is really the only preventive measure known against heart disease.

PRESENT SOCIAL AND MEDICAL PROVISIONS FOR PREVENTION

Distribution of medical and social service to care for children with infectious disease comes within the scope of the Committee on Medical Care for Children. State and local organizations are to be studied by Section IV, Committee A, of the Conference.

INTESTINAL PARASITES—ASCARIS AND HOOKWORM

Prevalence and Distribution

Hookworm and ascaris are essentially pioneer rural problems associated with ignorance and isolation. They are confined to certain areas in which the character of the soil and the primitive habits of the people make the conditions favorable to widespread infestation of the people with these parasites. Studies as to geographic distribution are available from special reports.

Protection

The medical principles underlying protection of persons infected with hookworm and ascaris are:

1. Early detection.
2. Early medical care for:
    a. Ridding patients of infestation.
    b. For treatment of resultant anemia.

PRESENT SOCIAL AND MEDICAL PROVISIONS FOR PROTECTION

In those areas where the parasites abound, public health departments have established protective measures through extensive and intensive control of human excreta by construction of sanitary privies and education of the populace in the proper use of these privies.

This problem will be considered by Section II, Public Health Service and Administration of the Conference.

Prevention

Since the organism causing these two parasitic diseases of the intestines and their method of entering the body are known, the

preventive measures are definite. The organisms present in the soil are deposited with excreta from infected humans. The principles of prevention include:

1. Sanitation.
   a. Privies—properly constructed and used.
   b. Disinfecting the ground known to be infected.
2. Personal hygiene.
   a. Covering parts of body exposed to infected ground in case of hookworm.
   b. General cleanliness, particularly of the hands, since the organism causing ascaris is transmitted by mouth.

PRESENT SOCIAL AND MEDICAL PROVISIONS FOR PREVENTION

The problem of prevention of hookworm and ascaris is one of sanitary control and education in sanitation and personal hygiene. Both of these are the important duties of departments of health. All health and social agencies are responsible for education of the general public in infected areas as to causes and methods of control of these diseases.

The specific methods for prevention and care of intestinal parasites (uncinaria and ascaris) must be decided by local conditions, but the medical principles here outlined should be recognized, approved and adopted everywhere in the work if it is to succeed.

PROBLEMS OF MENTAL HEALTH

This sub-committee was charged with the duty of reporting on the mental health problems, exclusive of mental deficiency, of individuals under 20. Accordingly, the problems of adults are mentioned only insofar as they represent the logical end-results of the processes arising in childhood and what follows applies primarily to the individual of average or superior intelligence while still under 20, though many points could apply equally well to the mentally deficient or to those over 20.

Meaning of Mental Health

Mental health is more difficult to define than is physical health. The latter, from which mental health cannot be sharply separated, implies more than the absence of recognizable symptoms of a definite disease. The same is true of mental health.

Mind comprises divergent forces, including the functions of acquisition, association, emotion and expression, and is subject to the laws of nature and variation. As such, it subsumes the social relationships of the individual. Through its functioning, the personality may be evaluated.

The healthy mind is sometimes described as one which presents no definite symptoms of the sort ordinarily associated with one of the recognized mental disorders (the psychoses, neuroses, epilepsy, psychopathic personality, and so on). But in its broader definition, mental health comprises more than this.

Mental health may be defined as the adjustment of individuals to themselves and the world at large with a maximum of effectiveness, satisfactions, cheerfulness, and socially considerate behavior, and the ability of facing and accepting the realities of life.

The highest degree of mental health might therefore be described as that which permits an individual to realize the greatest success which his capabilities will permit, with a maximum of satisfaction to himself and the social order and a minimum of friction and tension. This implies a stage of such well being that the individual is not conscious of unsatisfied tensions; does not show socially inadequate or objectionable behavior; and maintains himself intellectually and emotionally in any environment under any circumstance.

Not only is mental health, as positively defined, highly desirable, but even the mere absence of recognizable abnormalities in personality which interfere with normal social and personal relationships is decidedly worth striving for. That is to say, the alleviation and prevention of mental ill-health is of extreme importance to the individual and to society.

The Possibility of Alleviation and Prevention of Mental Ill-Health

Mental disorders are often organically determined as a result of birth and later injuries, infectious diseases, such as epidemic encephalitis, and other types of inflammatory and destructive processes in the brain. Even those abnormal states determined by acquired pathological conditions of the organism may often be alleviated by proper treatment, or even indeed eliminated by preventing the accidents or infections which lead to the brain damage.

Mental disorders are often ascribed to defective germ plasm

(heredity), but existing data on "hereditary transmission" must be viewed with extreme caution; much of the evidence gathered simply shows that mental ill-health is frequently found in certain family histories, and does not prove any causal biological relationship. Many psychiatrists now believe that at least some of the defects of personality formerly ascribed entirely to heredity are in reality acquired. They result from situational factors, operating in the early lives of individuals, subsequently often forgotten or otherwise obscured. The resulting mental disorders (certain psychoses: the neuroses) are functional, not organic, and they have been entirely cured by treatment directed at the attitudes and conflicts (mental content) of the person (psychotherapy) or at the disturbing situation (social psychiatric therapy). Such acquired functional disorders are of great importance, as they account for the majority of cases of mental ill-health occurring at practically all ages. The fact that they may be alleviated or prevented by special non-organic measures opens a wide range of possibilities for furthering mental health.

The Promise of Mental Hygiene

The numerical preponderance of functional disorders and the possibility of their alleviation and prevention is a great promise of mental hygiene, although emphasis upon alleviation and prevention of organic disorders must be maintained. The effects upon the individual of situational factors—the experiences at home, with brothers and sisters, parents, companions, at school, in the neighborhood, in occupation, in marriage, and so on, are extremely important in functional disorders. Hence, changes in the attitudes engendered, and resolution of the emotional complexes related to these situational factors, or changes in the factors themselves may and often do play a large part in resynthesizing personality. Not only this: a proper combination of situational factors will prevent the occurrence of mental illness, and such prevention is an important function and promise of mental hygiene.

However, mental hygiene can contribute, not only to the prevention of the development of recognizable abnormalities in personality interfering with healthful personal activity and social relationships, but also to the development of the best possible type of personality. Since mental health is an important goal for every human being, constructive mental hygiene promises re-

sults beneficial to every member of society, and not merely to a few "insane" mysteriously set apart from their fellows. The final goals, then, of mental hygiene are prevention of mental ill-health, on the one hand, and the building of healthy personalities to their highest potentialities on the other.

Absolute and Relative Mental Health

Mental health as previously defined is plainly a stage of perfection that is never actually reached by anyone. Just as there probably does not exist a completely healthy, entirely normal physical organism made up of absolutely healthy parts, so those gifted with the best of mental health present flaws visible in greater or less degree, commonly called "peculiarities" or "difficult spots." Indeed, a state of complete mental health could not be defined or described.

From the foregoing it is evident that the most which can be said is that some have better mental health than others. There is no sharp line irrevocably dividing those who are mentally ill from those who are mentally healthy. The two conditions shade into each other by minute gradations, and the precise point at which mental health becomes its opposite, mental ill-health, depends on social judgments that vary with time and place. Everyone presents trends, which, if developed to an extreme degree, would cause the label "insane" to be applied.

Consequently, to reiterate, insofar as mental hygiene can improve the adjustment of the mentally healthy, results beneficial to any member of society will result.

Proximate Goal of Mental Hygiene

The full effect of mental hygiene can only gradually be fulfilled, however, for at the present time problems of mental ill-health are so vast and pressing that any practical program must necessarily interest itself primarily in the alleviation and prevention of mental ill-health.

A further concentration of attention within the limits of the preventive field also seems advisable. Because of the comparatively smaller percentage of individuals who become victims of the graver mental disorders, mental hygiene must give great emphasis in its program to the larger percentage whose mental illness is evidenced

by minor twists and distortions of personality leading to illness and behavior (social adaptation) symptoms.

The Social Importance of Prevention

The prevention of these lesser mental maladjustments would strike at the very root of many of our most pressing social problems. Suicide, divorce, dependency, delinquency, crime, industrial maladjustment, and countless other personal and social difficulties have mental hygiene implications, and this fact is gaining increasing recognition. In fact it is almost a commonplace to say that mental hygiene, broadly understood, has something to contribute to the understanding of every human problem.

Mental Hygiene of Childhood a New Approach

Not until the opening years of the twentieth century was the preventive note sounded. In earlier periods only the more obvious mental disorders were recognized, and they as cases to be cured. There was no extension of mental hygiene concepts to everyday problems, and little attention paid to the possibility of prevention. The more hopeful trend began when the mental hygiene movement made prevention of the graver mental disorders the basis of its program.

Attention was first centered upon adults and adolescents—that is, those in whom serious mental disorders become manifest—but as the roots of many maladjustments were traced further and further back into childhood, it became clear that most work with adolescents and adults could only be remedial, and that true prevention must begin earlier, when habits and reaction patterns were being formed, often undesirably and with some grave implications for the future.

As recently as 1919, the Conference on Child Welfare Standards gave no directions for specific attention to mental health; the only recommendation dealing with mental conditions was one for the psychiatric examination of all atypical or retarded children in schools.

The striking results achieved by early workers in the field soon demonstrated the value of the new approach. It was found that the plasticity of the human organism during childhood makes possible not only the inculcation of desirable character traits, but also the modification of undesirable traits already established.

Childhood has aptly been termed the golden period for mental hygiene. Recognition of this fact has now pervaded many public agencies and the movement for mental hygiene of childhood is by no means limited to the numerous bodies specifically devoted to its promotion. The new approach has won its way as "approach" but much remains to be done in making it widely effective.

Incidence of Mental Ill-Health Among Children and Adults

In early childhood—even as early as four years of age—about one-third of apparently normal children of self-sustaining families, average in intelligence, have behavior problems sufficiently marked to necessitate treatment. To be sure, behavior problems do not by any means indicate future "insanity," but by far the greater number of functional disorders are first evidenced by apparently minor disturbances in childhood. In all such cases, prevention of later disorders is a matter of proper treatment during the very early phase.

The frequency of disturbances in mental development at early ages is not revealed by admissions to hospitals for the mentally ill. Mental illness requiring hospital care takes time to develop and there is marked reluctance to commit children to such hospitals. However, statistics gathered show an increasing admission rate to hospitals for mental diseases during the past ten years for individuals under 20. The bulk of these occurring in the age period 15 to 18 belong to the so-called "functional" groups, in which organic factors have not so far definitely been found. They constitute a real challenge to preventive as well as remedial work.

When the older population is considered, a truer picture of the real situation is obtained. There are, in mental hospitals, 250 patients over 15 years of age for each 100,000 of the general population; 80 (per 100,000 population) are admitted each year, 70 of these for the first time.

Moreover, the large number now confined in such hospitals, a total of almost 300,000, by no means includes all persons in obvious need of hospital treatment, since recognition is often slow and the facilities in many States grossly inadequate.

In the medical examinations of men for the army there were detected a certain number with psychoses who, of course, were not in hospitals. In New York State the number was almost 400 per 100,000 of those examined omitting neuroses. Including the lat-

ter, there were almost 600 per 100,000 suffering from psychoses or neuroses sufficient to incapacitate them for army service. Data from other States reflect a similar situation.

When all such figures are taken into account, and computation is in accordance with age differential incidence and mortality rates, it appears that the chances of persons, living in States with good facilities, being committed to hospitals for the mentally ill in the course of their lifetimes are about 1 in 20. Not only this: the chances of developing a psychosis or severe incapacitating neurosis (whether the person is sent to a hospital or not) are about 1 in 10.

In addition to the psychoses and neuroses, there are children who present many types of behavior which represent problems to those with whom they live. Some of these may be classified as habit problems in the sense that they are habitually recurring reactions to which objection is taken. In other cases, the problems are those of socially objectionable behavior, and in still others, there are personality problems, such as sensitiveness or withdrawal from the group, which indicate that the individual has not succeeded in achieving a healthy personality organization permitting him to be satisfied and satisfying in social relationships. These problems are the most numerous of all, frequently found in the histories of those who later succumb to serious mental disorders. There is at present no means of estimating their importance for the future of the individual child who presents them.

DEVELOPMENT OF EXTENSIVE REMEDIAL AND PREVENTIVE PROGRAM URGENT

The magnitude of the problem makes evident the necessity for developing a comprehensive program for the alleviation and prevention of mental ill-health, and the preservation of mental health. Our knowledge of causes and of methods for alleviation and prevention is still far from complete, but what we know already is enough to form the basis of a determined, nation-wide effort.

There are three major zones in which facilities exist, though insufficiently, for promoting mental health and combating ill health. These are (1) remedial and therapeutic prevention; (2) constructive prevention; and (3) research. While the same organization sometimes operates in all three fields, these functional fields are sufficiently sharply delimited to justify separate discussion.

Remedial and Therapeutically Preventive Facilities

An urgent need is for the wider extension of facilities for the care of early and acute cases of the graver mental disorders of all age groups. This may be done through (a) psychiatric wards or departments in general hospitals, or (b) state psychopathic hospitals. In one or the other way, there should be provision for competent medical and nursing care, with a minimum of restraint and legal formality.

Another urgent need is for the development of greater facilities for out-patient service, where early and mild psychoses, the neuroses, and less serious problems may be treated. These should be connected with both general and state hospitals.

In both instances—wards and out-patient departments—there should be special provisions for the care of younger children and adolescents. This is not now a common practice.

Clinical facilities should be more extensively available to courts, social agencies and school systems. Three major types of problems are encountered—the child whose behavior is such that he is recognized as a delinquent; the child whose future is in the hands of an agency; and the child who is a problem in school because of his behavior. The mental problems range from serious to mild; frequently environmental factors are the most important from a therapeutic standpoint.

Child guidance clinics may function as an integral part of or in close conjunction with the public school system, or in relationship to social agencies, but they also serve parents since they are concerned with general behavior disorders such as tantrums, stealing, oversensitiveness, day-dreaming, cruelty, restlessness, morbid fears, and so on, which are symptomatic evidence of underlying mental stress. Many children manifest such symptoms, possible precursors of functional disorders, sometimes of serious nature.

The work of the three-fold staff consisting of psychiatrist (who also is medical examiner), psychologist and psychiatric social worker illustrates the need for careful and thorough study of the origin of such problems from several angles. The study must include: a thorough physical examination (including such special examinations, serological, endocrinological, and laboratory, as seem indicated), neurological and psychiatric examinations, psychological examination (to establish the intelligence level and ascertain any special abilities or disabilities, and the degree of educational

achievement), and a very careful study of the environment, past and present, and the personal and social history of the child.

Each of these examinations is an integral part of the study of the whole child, and each is necessary for a complete understanding of the child as a total personality involved with, reacting to, and influencing a total situation.

Although child guidance clinics deal with pre-school children as well as those of school age, there are clinics which treat pre-school children exclusively. These are the "habit clinics" which deal with habit difficulties such as bed-wetting, thumb-sucking, food dislikes, temper tantrums, jealousy and so on, in children not yet of school age. Habit clinics often function in conjunction with nursery schools and kindergartens, but so few children attend these that the clinics must reach the others if their efforts are to count for much in the community at large. These clinics are extremely important for they reach the child in the most formative period.

Marital clinics are important. Nothing is more important in the development of personality and mental health for the child than a stable, comfortable home atmosphere. In addition to their mutual adjustment, the parents must understand children and their development. Advice and more active therapy are often needed by married couples if the welfare of the child, either present or prospective, is to be safeguarded.

Numerous other agencies (visiting teaching, personnel departments, attendance officers, and so on) deal with habit and behavior problems more or less effectively. Where they are conscious of the direction of effort, they are effective in the degree to which they apply mental hygiene methods, whether or not they see them as such.

Constructive Prevention

This field is largely educational, and is directed (1) to adults, helping to prevent their causing mental difficulties in children (indirect approach) and (2) to the children themselves, thereby helping them to prevent or solve their own difficulties (direct).

Constructive prevention, direct and indirect, properly developed is by all odds the greatest force making for mental health, the avoidance of misery and the achievement of success. Treatment and therapeutic prevention are and will be indispensable, but they are after all restorative in emphasis; constructive prevention has the greatest possibilities for producing that positive

mental health which is a state of well being in which the person realizes the greatest success his capabilities will permit, and in which there is a set of social relationships both personally and socially satisfactory.

CONSTRUCTIVE PREVENTION (INDIRECT)

Emphasis has already been laid on the need for dealing with the whole child and the need for considering the total situation. These are especially evident in constructive prevention; often the situation rather than the child must be treated, and most important in the situation are the people who constitute the dynamic elements. Personal and social histories of maladjusted children reveal the heavy burden of responsibility often chargeable to those closest to such children. Treatment of the child (or for that matter, the adult) as a separate, unrelated entity is not enough; he cannot be detached from a total situation involving home, parents, brothers and sisters, school, neighborhood and companions. Often it is not the child toward whom preventive measures must be primarily directed, but rather toward adults who are temporarily or permanently in intimate contact with the child. Anything which lends constructive values to adult understanding and attitudes helps to prevent mental ill-health in the child.

Consequently an indispensable part of a practical program for any community is mental hygiene education for the adults who control the environment of the child. There should be: (a) professional education; (b) general adult education; (c) pre-parental and parental education.

PROFESSIONAL EDUCATION

The teaching of the principles of mental hygiene should be a part of the training of those professional groups whose work brings them into private contact with large groups of children. Among these are pediatricians, general medical practitioners, nurses, public health officers, teachers of regular and special classes, visiting teachers, educational counselors, vocational guidance workers, school psychologists, school administrators, social workers, policemen, probation officers, juvenile court judges and similar officials, church workers, boys' and girls' club workers, playground supervisors, and so on. These persons often make great efforts to help "problem" children coming to their attention, but since they

sometimes lack knowledge or proper emotional attitudes, they may fail to help or may even harm such children, and moreover they may harm mentally healthy children as well. Hence the need for training in the basic principles of mental hygiene.

GENERAL ADULT EDUCATION

As with public health, the mental hygiene movement could not go far without general education. Any program for furthering mental health must include lectures, distribution of literature, newspaper and magazine publicity, and other means of reaching the general public. Many organizations should be given mental hygiene information, and should, if possible, be persuaded to aid in its further dissemination. General adult education calls for strenuous and long-continued effort.

PRE-PARENTAL AND PARENTAL EDUCATION

It seems that all community agencies concerned in the mental hygiene of childhood will succeed in proportion to the cooperation of parents.

Preparation for marriage and for parenthood is seriously needed. Either by special provision or through facilities functioning in other capacities as well, young people should be guided to personal adjustment before marriage. Instruction in the principals of adjustment to married life should also be provided, either in the early part of the marriageable age, or better, just before marriage takes place. Further, education in a knowledge of child care and training, either before or after marriage, is highly desirable. The marital clinics already mentioned could function long before difficulties in adjustment arise, specifically, perhaps in advising pregnant women and their husbands regarding the adjustments to be made, as an extension of the work of the prenatal clinics.

A second and even more important step is parental education. A great deal of specialized information is necessary in order to be a successful parent, but mere information, although indispensable, is not enough. Any effort with parents should penetrate to their own emotional attitudes and personal blockings; they should be awakened to their own importance in the total situation of the child, and to some conception of the relation of their own drives to that situation. Parents often have exaggerated emotional reac-

tions to such problems as stealing, lying, masturbation, and temper tantrums, whereas jealousy, undue self-consciousness, excessive day-dreaming, and other evidences of grave personality deviations in children may pass unnoticed.

Parents need help in understanding the phenomena of development, in grasping relative values in family situations, and so on. This can best be given by aiding them to understand their own reactions toward the children, which often result from mental problems of their own needing careful study. Many parents create problem situations of which behavior disorders in the children are but symptoms. A program for the mental hygiene of childhood must pay much attention to the parents who create the total situation. Hence, every community mental hygiene program must insure parental education—for the socially privileged as well as for the socially underprivileged.

CONSTRUCTIVE PREVENTION (DIRECT)

Although indirect prevention is now so important that interest is shifting from the child to the adults who surround him, it is still necessary to lay great stress upon the inculcation of proper mental hygiene attitudes in the child himself, i.e., upon direct constructive prevention. In addition to adult influence in general and parental influence in particular, this may be done through: (1) nursery school, kindergartens and other pre-school organizations; (2) organization of public school programs so that they center about the child, his capabilities and his adjustment to life rather than about subject-matter; (3) education of grade school children in the principles of social relationships; and (4) courses on personal mental hygiene in high schools and colleges.

It may be well to point out that much excellent mental hygiene work does not bear the label, and schools have a splendid opportunity to exert beneficent influence in ways that do not focus undue attention upon either parents or children. This is often of great value when parents are over-solicitous or children over-sensitive; in such cases active therapy sometimes aggravates the situation whereas more casual methods reach the desired goal.

All classes should in a sense be special classes—that is, differentiated to the extent necessary to fit the needs of every mental level and every social group. This may be immediately costly, but it is cheaper than the ultimate terrific costs of delinquency,

crime, poverty and dependency so inevitably resulting from educational misfits.

When children are properly prepared to face social realities, the familiar adolescent disillusionment and cynicism so often correlated with mental ill-health has less chance to develop. Over-idealistic teaching should give way to at least a modicum of realistic discussion.

It should be clearly understood, however, that for a long time to come the inculcation of proper attitudes toward the more intimate relationships—sexual, for example, can best be performed by intelligent and emotionally adequate parents. The school or other agency can perform only in a substitute capacity, usually with less satisfactory results.

In our complex culture the period of adolescence is often one of intense mental conflict, and anything that can be done to alleviate this may be a direct preventive of mental ill-health. It is probably advisable to give instruction in mental hygiene during this period by implication rather than explicitly, although some high schools and colleges have successfully followed the latter method. "Educational counselors" or "student advisors" who have had thorough training in the principles of mental hygiene are of great value no matter which method is followed, and should be an integral part of every educational institution dealing with adolescents. Thus may the next generation of parents be better prepared to rear healthy-minded children.

Research

The program sketched above is designed to carry into practical effect the knowledge of the present. But extensive as present knowledge is, there is great need for more, hence the need for research.

We do not know enough about the actual incidence of mental ill-health. Estimates are better than nothing, but exact figures for the whole country would be far better. We do not know enough about the exact relation of organic and functional mental disorders. Nor do we know enough about the influences which determine personality and behavior patterns, and so on. If space permitted, a lengthy series of vitally important problems for research might be listed, each one demanding early solution if mental hygiene is to be as useful as it should be in everyday life.

Extension of census service, institutes publicly and privately financed, national promotional bodies, ready cooperation on the part of community agencies, and an informed public opinion are all necessary if research making for mental health is to advance.

Community Responsibility for Mental Hygiene Program

It should be evident from the foregoing that only a broadly conceived and administered program can be of real worth in promoting mental health and combating mental ill-health.

The responsibility for a practical program that will make preventive and remedial facilities readily available ultimately rests upon local communities whether it be county, town or city. No program that is passively accepted from without can ever meet the situation.

A vital requisite in the mental hygiene program is a strong state agency for the direction and stimulation of the work of local agencies. The State could thereby establish standards, and coordinate the local efforts for maximum effectiveness.

Moreover, the community must supplement the mental hygiene clinics, and so on, which form part of the practical program by organizing itself as a whole to provide all the types of recreational, cultural, and social opportunities which are so important in the development and organization of personality. Every individual—child, adolescent, or adult—is a total personality involved with, reacting to, and influencing a total situation, and the best remedial and preventive facilities may be rendered useless if the community elements in the total situation make for mental ill-health rather than health. No program is practical if it does not form an integral part of a community functioning as a whole.

PROBLEMS OF MENTAL DEFICIENCY

Mental deficiency as a term has been widely used to include the clinically feeble-minded, namely, idiots, imbeciles and morons. In recent years, however, there has been an increasing tendency to recognize feeble-mindedness also in terms of marked developmental retardation. This has brought about a tendency on the part of some authorities to consider mental deficiency not as feeble-mindedness in the clinical sense, but as a degree of subnormality. Consequently, there is some confusion today as to the accepted meaning of mental deficiency, since some authorities continue to

use the term as synonymous with clinical feeble-mindedness while others use it as an inclusive term for retardation other than feeble-mindedness.

In order to treat adequately with the problem of the feeble-minded as well as the subnormal, the committee has deemed it advisable to formulate two distinct programs: (1) One for that group of persons who are clinically diagnosed as definitely feeble-minded; and (2) one for the group which cannot be clinically diagnosed as feeble-minded, but who are shown to be subnormal on the basis of other measurements.

This double program has been thought advisable because of the fact that intelligence and normality are terms which are reputably and widely used with various meanings—a fact which has complicated the wording of this report. However, the committee proceeds with full cognizance of the differences in usage, but believes that the basic program outlined is not affected.

EXTENT OF THE PROBLEM

The number of the feeble-minded in the general population is not agreed upon by all authorities. Estimates place the proportion at not less than one-half of one per cent and not more than two per cent of the total population. A conservative estimate of one per cent has been repeatedly established by the various surveys and by the medical examining boards during the World War. This percentage varies somewhat with economic and geographic circumstances. The relative number according to sex has not been accurately determined but appears to be appreciably higher for males than females. The proportion varies with age, being considerably higher among children than among adults.

The number of the intellectually subnormal may be determined from the distribution of intelligence in the general population. A Stanford-Binet mental age below 12 or an I. Q. below 85 includes 15 per cent of the unselected adult population. Variations in this percentage occur when economic status, locality and racial, nationality and age groups are considered.

IMPORTANCE OF THE PROBLEM

The feeble-minded and subnormal who have not had the benefit of social supervision and training are greater risks when thrust into the turmoil of modern life; and many of them soon become

social and economic tragedies. Moreover, the burden falls not only on themselves, but on the whole of society. For example, there is little doubt that feeble-mindedness and subnormality play a considerable part in first, extreme poverty and dependency, and second that it sometimes is a contributing factor in crime and delinquency.

Surveys of homes for dependent children, county poor farms, and almshouses show that from one-sixth to one-third of the inmates are feeble-minded. Social workers time after time report one-sixth to one-fourth of their cases in the feeble-minded category. Oftentimes their best efforts at adjustment are baffled because the people with whom they are trying to deal really cannot *and should not* be cared for outside of institutions.

Feeble-minded and subnormal persons frequently manifest antisocial behavior. The proportion of feeble-minded persons among the inmates of penal and correctional institutions appears to be appreciably greater than that usually estimated for the general population although the exact proportion has not yet been positively determined.

RELATION TO SOCIAL AND ECONOMIC STATUS

Studies have shown that feeble-mindedness and subnormality is relatively more prevalent in the lower social and economic groups. Since it is from those very groups that the majority of dependents, delinquents and criminals are drawn, we may infer that some of the relation between feeble-mindedness and social problems is due to these social and economic factors rather than to feeble-mindedness as such.

However, it should be emphasized that feeble-mindedness in itself is not a direct cause of crime but only a predisposing factor.

SOCIAL AND ECONOMIC POSSIBILITIES

While feeble-mindedness and subnormality are often contributory causes of social maladjustment we must not infer that all persons included in these groups are socially hopeless. Many of the individuals are well adjusted and "get along" fairly well under favorable circumstances. A constructive program for the better training, placement and supervision to include the greatest number of the feeble-minded and subnormal therefore will have as its basic aim, socialization which means the development of

personality in relation to social environments so that within the limits of his ability the individual may be made a social asset instead of a liability.

The Feeble-Minded

Feeble-mindedness is a condition of fundamental social incompetence which is the result of seriously retarded mental development. While it is recognized that many of the high-grade feeble-minded (the morons) may become socially well adjusted under sound programs of social control especially designed for them, it is equally clear that such programs produce no permanent changes in the essential characteristics of the feeble-minded. Feeble-mindedness includes idiocy (social incompetence where mental development is less than three years as compared with normal children), imbecility (where the level of mental development is from three to eight years), and moronity (where the mental development is from eight years to somewhat uncertain upper limits which do not ordinarily exceed twelve years). In the case of children, these limits of mental development are expressed in relative terms, that is, I. Q.'s below 20 for idiots, I. Q.'s from 20 to 60 for imbeciles, and I. Q.'s 60 plus for morons. These I. Q. limits are based on 14 years as the average normal limit.

All feeble-minded require more or less constant social supervision or aid. Idiots and imbeciles usually require the most assistance or supervision. Morons may become self-sustaining under favorable conditions of training, placement and supervision.

Program for the Feeble-Minded

A comprehensive program for the social control of the feeble-minded should include:

1. Identification and Registration.
2. Segregation.
3. Community supervision.
4. Prevention.

It is first of all necessary to discover and classify as early as possible those persons who are definitely feeble-minded. This can be accomplished through various types of mental clinics such as those already maintained in institutions, in public schools, and in connection with social welfare agencies. It is essential that these clinics have an adequate and competent personnel.

SEGREGATION

The data secured through identification and registration of the feeble-minded would point out type of care most essential in the individual case and would indicate the type of provisions necessary.

These provisions include: (a) special classes; (b) institutional care and training; and (c) colonization and parole.

It is to be hoped that before many years the public school, through special classes and other pedagogical provisions, will be so organized to deal with feeble-minded children that it will be the largest and most important single agency in developing them for economic and social usefulness. The curriculum should be eminently practical; the emphasis should be manual, although academic work should be given to the child's capacity (the fifth grade is about the limit). There should be a program of thorough re-examination at suitable intervals to determine the child's progress. Adequate follow-up work and vocational guidance should be instituted.

While a considerable number of the feeble-minded can be cared for in special classes, institutional care must be provided for those who cannot be suitably adjusted in the community, and whose parents cannot provide suitable care or surroundings for them. Institutional training must be directed toward the development of desirable social behavior, beginning with basic habits, and leading on to the development of self-reliance and self-control, obedience, industry, thrift, moral behavior, and capacity for social intercourse.

Here again emphasis must be laid upon manual and industrial training rather than upon academic education. Handwork of all sorts offers these children the best educational and vocational opportunities.

Institutional care and training, taking place as it does under relatively controlled conditions, should set standards for all extra-institutional care.

In this connection it is important to consider that even in those States which make the most extensive institutional provision for the feeble-minded, not more than one-tenth of the feeble-minded, at a conservative estimate, are cared for. The remaining nine-tenths are in the community, for the most part, without a coordinated program for their control and supervision. This suggests that a larger part of a proposed program must consider the

90 per cent of the feeble-minded who are at large in addition to the 10 per cent now receiving institutional care.

Special institutional provisions should be made for defective delinquents who require custody for an indeterminable period if not for life, because of their deep-seated anti-social and animal tendencies.

In conjunction with institutions there should be developed small and suitably located agricultural, domestic or industrial colonies, in which the groups of boys or girls who seem capable of freer action than is possible in the central institution can be given such preparatory training as ultimately will help them to succeed in becoming socially adjusted, and which may lead to their parole.

For those on parole, competent supervision must be provided, for only by guarding and directing the feeble-minded person throughout his entire life can the effect of training be maintained. No ward of the State should be paroled until all available information regarding home conditions has been carefully considered. In many cases the painstaking effort of institution and colony training that has made the child happy and moderately capable of self-direction is entirely lost, because the low-grade or unsuitable environment to which he is returned makes successful adjustment impossible, or because proper home supervision is lacking.

COMMUNITY SUPERVISION

As there is general agreement that a large number of the feeble-minded do not require institutional care the necessity of developing a comprehensive program of community supervision becomes apparent. For the feeble-minded who have attained a degree of social and economic competence in the community, adequate machinery of supervision must be available in order to help them retain their status of social adjustment and to assist them if their social security is threatened.

For the feeble-minded in special classes the school should assume the necessary community supervision. The supervision of home conditions is extremely important so that the benefits of special class training and occupational placement will be preserved. Parents or guardians must be given a real understanding of the child's problems, for otherwise they may destroy habits that have been carefully built up.

While parole is an integral part of the institution's training

program the individual discharged from the institution should come under community supervision. The community supervision program should likewise be closely related to the courts, particularly children's courts, and to the organized social service agencies.

Local agencies dealing with feeble-minded must be effectively coordinated for the work of community supervision under the general guidance of a state-wide public agency.

PREVENTION

In addition to dealing with the immediate problems of feeble-mindedness, every effort should be directed towards prevention. At least one-third of feeble-mindedness and perhaps as much as one-half arises from pathological or accidental causes over which very little control can apparently be exercised. The remaining one-half to two-thirds of the cases are generally supposed to be due to heredity. It is evident, therefore, that no program of prevention can eradicate feeble-mindedness, but it is equally evident that preventive measures can be taken to reduce hereditary feeble-mindedness. Selective sterilization is a means commonly advocated for accomplishing this purpose. Although this measure is fraught with numerous difficulties, this means of prevention should be developed as far and as rapidly as significant information and public opinion warrant.

In this connection it should be emphasized that even where there may be doubt as to the hereditary nature of the feeble-mindedness, it is well to remember that feeble-minded persons' hold upon social adequacy is precarious and therefore they should not run the risk of reproduction. Apart from the possibility of the inheritance of their condition, the added burden of rearing children would jeopardize their success in the community. Moreover, as parents they would be able to provide only a low-grade environment, and that handicap should not be visited upon any child whether feeble-minded or not.

There is now little doubt that properly drafted laws permitting sterilization are constitutional, and that the operations necessary cause no harmful alterations in personality and are not attended by appreciable mortality. Sterilization should never be performed without the most careful examination of all the circumstances in the case by experts delegated to the task. When adequately safeguarded, little individual or social danger attends

the measure, and for the prevention of some of the individually and socially injurious effects of feeble-mindedness selective sterilization may be regarded as a useful adjunct to any program.

Intellectual Subnormality

Intellectual subnormality as defined by the committee includes socially competent persons whose level of mental development overlaps the upper limits of feeble-mindedness, namely, a Stanford-Binet mental age from 8 to approximately 12 years, or a Standard I. Q. from 60 to approximately 85. These I. Q. limits are based on 14 years as the average normal limit. In view of the overlapping between the upper limits of mental development for the high-grade feeble-minded and the lower mental levels of intellectual subnormality, it is difficult to distinguish between the high-grade feeble-minded (the morons) and the intellectually subnormal. In brief the intellectually subnormal is socially competent while the moron is not.

Nevertheless, it is recognized that, just as the moron may become well adjusted under favorable conditions, the intellectually subnormal person may become unadjusted because of unfavorable conditions. It is this instability of adjustment and unadjustment which makes it difficult to distinguish between high-grade feeble-mindedness and intellectual subnormality on the basis of intelligence tests alone.

Program for the Intellectually Subnormal

A comprehensive program for the social control of the intellectually subnormal includes:

1. Recognition.
2. School training.
3. Vocational guidance and placement.
4. Follow-up and supervision.

The proper recognition of intellectually subnormal children at their very early age periods is of the first importance. This may be most readily accomplished through habit clinics and in the public schools by the use of group intelligence tests, supplemented by comprehensive clinical diagnosis in doubtful cases.

It is realized that to distinguish between the high-grade feeble-minded and the intellectually subnormal is by no means easy in

the early life-age periods, but is progressively less difficult in the higher age ranges. As a rule these children are most easily recognized by their failure in academic school subjects rather than by an all-road maladjustment. The accurate separation of the intellectually subnormal from the feeble-minded then requires the services of a mental clinic with a competent personnel.

SCHOOL TRAINING

The public schools have a peculiar responsibility to the intellectually subnormal because they are capable of a fair degree of initiative and resourcefulness, and possess qualities which make for independent social adjustment. It is important therefore, that their education be directed toward the development of a social type of personality, stressing such essentials as personal hygiene, physical education, habit training, motor and sense training, speech correction, emotional control, and the formation of character.

It is to be remembered that these children are relatively unsuccessful in academic school work because of their low intelligence. The majority of them, however, do succeed in manual subjects. The proper education of intellectually subnormal children, therefore, requires a greater emphasis on manual instruction and industrial training than they now receive.

VOCATIONAL GUIDANCE AND PLACEMENT

Intellectually subnormal children generally leave school as soon as compulsory school laws permit. They enter industry or other occupation at an early age and normally with little regard for the future.

The social outlook for these children in terms of the stability of their employment could be greatly improved through an adequate system of vocational guidance and occupational placement adapted to their needs. This could tend to safeguard the occupational future of such children and incidentally reduce much economic waste.

FOLLOW-UP AND SUPERVISION

In order to assist the child to retain the benefits derived from school training, the school should maintain a close and helpful contact with the child's extra-school environment so that condi-

tions which tend to counteract the work of the school may be corrected.

In every school system dealing with the intellectually subnormal child, it is desirable to have an organized visiting teacher service which would help in bringing about necessary improvements in the home situation and in securing for the child the right kind of neighborhood and community influences.

Research

There should be constant research into the causes, prevention, and amelioration of feeble-mindedness and intellectual subnormality. Only in this way can maximum control be attained. The present measures for the control of feeble-mindedness have been developed largely on the basis of experience. Such research as has already been conducted has shed important light on the nature of the problem and has suggested most appropriate measures for dealing with it. A complete program for further progress requires that further research be promoted as far as practicable. Research is particularly needed to develop more effective measures for the treatment of feeble-mindedness and to prevent conditions which arise from non-hereditary causes.

While enormous amounts are expended for the care and training of the feeble-minded and intellectual subnormal the sums devoted to research are utterly inadequate. It is most urgent therefore that increasingly larger sums be made available for scientific studies into the nature, treatment, causes and prevention of feeble-mindedness and intellectual subnormality.

Coordination of Community Efforts

The success of this program will depend upon the effective coordination of effort in respect to its administration. The various responsibilities of the State, the county, the community, the family and the individual citizen must be made clear and the program should be so administered that all these agencies are properly guided and coordinated. This can perhaps best be accomplished through central state leadership which will encourage the development of all aspects of the program. Adequate standards must be determined; uniform procedures should be developed; public opinion must be cultivated; financial support must be provided.

Hopefulness of Social Control

It is perhaps true that large numbers of feeble-minded and intellectually subnormal will probably always continue to be present in the social order.

A considerable number of the feeble-minded and subnormal are engaged in happy, useful work and lead contented lives in their own limited ways. Many of them have a definite function in society.

Regarding the social menace which feeble-mindedness and subnormality present, it is fortunate for society that through modern measures shown to be feasible and fruitful, many of the feeble-minded and subnormal may be diverted into channels of social usefulness.

Progress will be made only by facing the facts and coming to know and understand the feeble-minded and intellectually subnormal in such a way as to make them, to the largest degree possible, social assets instead of social liabilities.

THE VOCATIONAL ADJUSTMENT OF THE PHYSICALLY AND OF THE MENTALLY HANDICAPPED

As our social and economic life becomes more complex, persons who are physically or mentally handicapped are finding it increasingly difficult to adjust themselves to their environment and to find their proper place in society. It is unnecessary to point out that the efficiency and welfare of society depends upon the extent to which each individual contributes to its social and economic life. It is generally conceded to be poor social economy to permit the existence in society of handicapped persons who, without proper training are likely to become dependents, when the application of a constructive program would enable them to enter the ranks of productive workers.

Among the physically and the mentally handicapped in America today there are large numbers of children who are now or will later become social and economic liabilities unless society's attitude toward the physically and the mentally handicapped becomes wholly constructive and comprehensive services are provided which will render them fit to enter the ranks of productive workers.

A majority of the physically and of the mentally handicapped children possess aptitudes and abilities which, when developed by

proper social, academic and vocational training can make these children socially and economically competent. To every child is conceded the right to develop to the maximum of his capacity. It is society's particular duty to see that physically or mentally handicapped children have this opportunity, as a matter of right and fair play, in order to conserve human resources, and to afford protection to society against dependency, pauperism, frustration and delinquency.

That it is feasible to prepare for and place the physically or mentally handicapped in productive employment has been amply demonstrated. For a number of years Federal-State rehabilitation services, placement bureaus for the handicapped, certain city school systems, and a few industries have fitted thousands of handicapped persons for remunerative employment, and for the greater part on an "economic competitive basis." A study of the records of those served by placement agencies indicates that a large majority of them are socially and economically adjusted as a result of the service they received. In this connection a number of studies made by State and Federal rehabilitation bureaus show that industry can absorb handicapped persons at all levels of employment without appreciable interference with the rate of production in the industrial organization.

On the basis of this experience the thesis of this report is that there are jobs at which a large number, if not a majority of the physically or mentally handicapped can work, provided they have had adequate preparation and provided there is a favorable attitude on the part of industry and the public.

EXTENT OF THE PROBLEM

The extent of the problem with respect to the number of physically or mentally handicapped children who require specialized services for social and economic adjustment is not definitely known. Data available are fragmentary, isolated, and not generally reliable.

However, on the basis of surveys of special classes in city schools, special surveys of the mentally deficient, census of crippled children, and tabulations of children in institutions, it has been variously estimated that in the United States there are from 3,000,000 to 5,000,000 persons under twenty-one years of age who are physically or mentally handicapped. This estimate includes the blind and partially seeing, the deaf and the hard of hearing, the

crippled, those who are mentally deficient or disordered, who are suffering from tuberculous, parasitic or cardiac diseases. The range of estimates is evidently due to differences in definition of terms and of groups included in the calculations.

The Vocational Needs of the Physically and of the Mentally Handicapped Child and How They Can Be Met

While it is recognized that there are differences in the vocational needs of the various types of the physically and of the mentally handicapped, depending upon the nature and degree of the handicap, it is not feasible to enumerate in this brief report the specific needs of each group but rather to set forth the general needs of the group as a whole; to point out the general principles that should obtain in dealing with their problems, and to show how the needs can be met in accordance with these principles.

The general needs common to all physically or mentally handicapped children may be summarized under the following grouping:

DISCOVERY AND DIAGNOSIS

The highly important need for early discovery and diagnosis of the physically and the mentally handicapped child can be effectively met through (a) an extension of the existing local and state, public and private health services providing for adequate examination services for all children, these examination services to include not only the functions of discovery but diagnosis as well, and in some instances complete medical treatment; (b) provision in the public school system for psychological and psychiatric services for classification purposes and for diagnosis of those discovered to be mentally thwarted, retarded or disturbed.

CURATIVE AND REMEDIAL TREATMENT

The curative and remedial treatment instituted in behalf of the physically and the mentally handicapped child must be so directed that he may be enabled to function physically and mentally, as normally as possible.

The curative and remedial treatment recommended should be carried out as closely to the home of the child as is practicable and should be followed through by the local or state, public or private health agencies. The services of the family physician should be

employed to the fullest extent and the resources of the existing public and private medical and social work organizations should be enlisted.

Where parents are unable to pay for the necessary treatment it should be given in out-patient clinics and in public or private hospitals.

SOCIAL CONTACTS

The ultimate social and economic adjustment of the handicapped child depends to a large extent upon the attitude which he has toward his handicap, his associates and the work he is to do. Properly contracted social contacts are needed in order to enable the child to acquire favorable attitudes. Such contacts will instill self-confidence, good morale and a spirit of independence.

There should be a plan by which physically or mentally handicapped children may have social contacts with both normal children and other handicapped persons. There is a division of opinion as to whether as a matter of policy handicapped children should be educated in the regular school with provision for special classes where needed, or should be segregated into special schools. However, when the value of the social contacts with normal children is considered, education of the handicapped in close proximity with the normal seems the desirable procedure, provided, of course, due consideration is also given the interests of the normal children.

Social and recreational organizations composed of the physically or mentally handicapped based on their varying types are recommended where the usual organizations for the normal cannot be modified to meet the needs of the handicapped.

EDUCATION

In the education of physically or mentally handicapped children there should be a differentiation of educational methods and procedures to provide the special kind of education required by their special needs.

In view of the relatively longer period of preparation for life's work necessary in the case of handicapped children and because of the somewhat restricted range of employment opportunity open to them, a restatement of the aim of education in relation to the physically and the mentally handicapped may seem advisable. In any such restatement emphasis should be given to the need for vocational training including preparation for professional, com-

mercial and industrial pursuits depending upon the degree and nature of the handicap; and to the adaptation of the curriculum, subject-matter and methods necessary to meet the aim.

While the schooling of the handicapped child should be carefully adapted to his individual needs and abilities, it goes without saying that character development and general education, especially in its social aspects, should be given an important place.

The second step is an adjustment of the school facilities and administration, wherever necessary, to the peculiar requirements of the handicapped, i.e., special teachers, home teachers, rest periods, special equipment, provision for transportation and for concomitant physical or mental therapeutic treatment.

EDUCATIONAL AND VOCATIONAL GUIDANCE

There should be provided for the physically and the mentally handicapped child, accurate information and competent advice as to his educational needs and vocational possibilities.

The guidance and placement of the physically and of the mentally handicapped in employment requires the services of specially trained counsellors. To meet this need the staff of the responsible agency should include such specially trained counsellors and placement officers as may be required to meet the situation.

It is very desirable that schools and colleges offer training courses for workers with the handicapped so that these future counsellors and placement officers may receive adequate preparation.

PRE-VOCATIONAL TRAINING

Pre-vocational training will make for the development of muscular coordination and elementary skills, and serve as an aid to vocational guidance through the discovery of interests and abilities.

The need for this service can be met in the usual domestic arts, commercial and industrial courses found in many schools, especially in junior high schools. Where such special facilities are not available manual education of an elementary type may be given, to a degree, through the use of appropriate materials and equipment in the regular classroom.

The ideal arrangement, however, would be to provide special buildings and equipment for the pre-vocational and vocational training of the handicapped.

VOCATIONAL TRAINING

Vocational training, if related definitely to local industrial, commercial and professional opportunities is the best guarantee of a specific kind of employment. Such training can often partially be given within the public school system, and through the utilization of special schools. For a large number, however, training on the "job" will have to be arranged.

PLACEMENT IN EMPLOYMENT

A special service of placement must be provided for the physically and for the mentally handicapped.

Only trained placement officers who know industry and understand problems of the handicapped and of the particular individual to be placed can meet this need. The central agency responsible for the education of the handicapped child should provide this service.

FOLLOW-UP

Finally, the physically and the mentally handicapped must be followed-up in employment to insure adjustment to the job and to the social environment.

This follow-up should be a part of the placement service.

Present-day Efforts to Meet the Vocational Needs of the Physically and of the Mentally Handicapped

While the existing provisions for meeting the vocational needs of the handicapped are wholly inadequate there are several active programs that point the way to an ultimate solution of the problem. Forty-two States have adopted Federal-State programs of vocational rehabilitation for the physically handicapped of employable age. Ten cities have established placement bureaus for the handicapped. Several cities and a few States provide sheltered workshops for certain types of the handicapped. Thirty-two States have programs of physical restoration for crippled children.

A few States and a number of cities have inaugurated programs of special education for handicapped children. While in general these programs provide chiefly for education, gradually other features are being added, making for a complete program of vocational preparation and employment.

Residential schools for the care of special types of handicapped, e.g., the blind, deaf, and the feeble-minded, are giving increasing recognition to the vocational needs of those under their care.

A Proposed Vocational Program for the Handicapped

In order to make it possible to meet the needs incident to preparing the physically and the mentally handicapped child for social and economic life, and at the same time safeguarding the interests of those who give them employment, a comprehensive program must be developed. This program requires a high degree of cooperative effort on the part of the medical profession, health and social service workers, the educational authorities, and industry in general. Each of these groups must be ready to meet the needs of the physically or mentally handicapped child in its particular field of activity.

The most important functions in an adequate program include:

1. A central state coordinating agency.
2. The creation of constructive attitudes.
3. The development of employment opportunities.
4. Protective legislation.
5. Promotion by private agencies and industry.
6. Promotion by the national government.

A Central State Coordinating Agency

The social and economic adjustment of the physically and of the mentally handicapped requires the effective coordination of the efforts of the home, the school, the medical profession, social and health agencies and commercial and industrial interests. Because of differences in conditions existing in local communities and the nature of the problem it will have to be met differently by different communities.

In order that the efforts of all those working with and for the handicapped child may be as effective and far reaching as possible it is desirable that a central state agency be available, through which the efforts of the various public and private groups concerned may be coordinated, and state and local initiative stimulated.

As there is common agreement that the work of vocational adjustment of handicapped children should be administered as an educational activity, it would probably be advisable to place the state supervision of handicapped children in the existing state re-

habilitation agency now organized as a function of the state department of education in the majority of the States.

An important place in the central state coordinating agency will be occupied by the state rehabilitation services already existing in forty-two States, which, for the last ten years, have progressed in developing sound procedures in the vocational adjustment of the physically handicapped of employable age.

CREATION OF CONSTRUCTIVE ATTITUDES

It is vital to develop a program of education which re-affirms the principle that handicapped children are not peculiarly set apart from other children and that their needs in general are the common needs of all children. However, due to some physical or mental handicap they require a more intensive application of physical, social, educational, and vocational training.

Parents, teachers, the public and industry must be embraced by this program of education in order to acquaint them with the needs of handicapped children, to develop a constructive attitude toward this problem, and enlist their help in its solution. This could be accomplished through the coordination of the efforts of a number of national and state organizations now fostering the interests of the various types of the handicapped; through an enlargement of their membership to include all the forces needed in the solution of the problem; through the press; and through personal presentation to such association and groups as would help promote public opinion toward an appreciative attitude of the vocational possibilities of the handicapped child by the demonstration of results with the individual case.

DEVELOPMENT OF EMPLOYMENT OPPORTUNITIES

The employment of the physically and of the mentally handicapped child of working age would seem to proceed on three levels: (1) those who are able to work in regular industrial, commercial or professional pursuits alongside of the normal worker on an economic competitive basis; (2) those who are able to work only in a sheltered environment, e.g., a subsidized workshop; and (3) those who are unable to travel to and from work and therefore must work in their homes having their materials and finished products delivered for them.

If all the physically and the mentally handicapped are to be

given an opportunity to work, obviously employment opportunities will have to be developed that will provide work at each of these levels of employability.

In developing these employment opportunities, industry becomes the focal point for the first level of employability. The program of providing fair opportunities of useful and profitable employment for the physically or mentally handicapped child of working age is based on the philosophy that any handicapped person who can, despite his handicap, perform a particular job as well as normal persons has a right to employment; and furthermore, if he can compete with the able-bodied in employment, he will secure and hold it.

Industry is generally openminded, willing to be convinced of the feasibility of employing the handicapped. It is believed that if it can be demonstrated to the employer that a physically or mentally handicapped young person who has been adequately prepared can perform as well as the normal worker he will give him employment.

In cases where there has been failure to secure the employer's cooperation it probably was due to the fact that the employment possibilities of the handicapped in industry have not been adequately demonstrated. A more extensive use of job analyses and surveys of employment opportunities are suggested as a means of demonstrating the vocational possibilities of the handicapped and of creating a favorable attitude on the part of the employer to secure his complete cooperation in the scientific placement of the handicapped.

There are also many tasks in city, state and federal establishments that could be effectively performed by the physically and mentally handicapped. A comprehensive survey of these positions should be made with a view of filling these positions so far as is practicable with the physically and mentally handicapped.

For those handicapped who are to be considered on the second level of employability, sheltered workshop facilities (subsidized by public funds, perhaps) should be provided to include all physically or mentally handicapped who are unable to engage in regular industrial pursuits, but who do not require institutional care.

For the home-bound handicapped, provision should be made for such local consignments of work as can be secured to be done in the home, with the additional provision for specific consignments of work from the publicly maintained sheltered workshops.

In order to standardize production and provide for the sale of products, work for the home-bound should be under the direction and supervision of the sheltered workshop.

PROTECTIVE LEGISLATION

Workmen's compensation laws (in 44 States, Alaska, the District of Columbia, and the Federal Government) make difficult the employment of the physically handicapped because of the fear that such workers are more liable to injury in employment than those without physical defects. These laws have projected the insurance caution into places of employment, encouraged physical examinations and the upgrading of personnel. They create an additional handicap which the physically handicapped must face when they seek employment. There are no actuarial data which show that physically handicapped workers are a greater risk than normal workers, but employers, particularly the larger ones, think the risk is greater and a condition has been created in industry which must be met by amendments to the workmen's compensation laws if the physically handicapped in large numbers are to be employed upon the same terms as workers without physical handicaps.

Twelve States have attempted to meet this problem by providing that if a worker who has sustained a permanent partial disability, such as the loss of one hand or arm, one foot or leg, or one eye, suffers the loss of another of these members, making him totally disabled permanently, the employer shall only pay for the actual loss which occurred in his employment, and the element of permanent total disability after the scheduled loss has been paid by the employer shall be paid by the State from a special fund provided for the purpose. This has removed part of the employment handicap, but even in these States employers are reluctant to accept handicapped workers because of the supposed extra insurance risk.

Serious onsideration should be given to the subject of state insurance for the physically handicapped to assure their employment, perhaps freeing the employer from responsibility after the payment of twelve months' compensation for certain specified disabilities.

Present laws governing the employment of children should be extended to provide that no child having or being predisposed to certain physical or mental ailments would be employed at a job that would produce excessive physical or mental strain. Such other

legislation as will safeguard the interests of both the handicapped and the employer (including special regulations relative to the employment of children and young persons in hazardous occupations, general measures relating to safety, sanitation and so on, and compensation laws as they apply to minors) should be promoted.

Laws making the reporting of congenital deformities by physicians and midwives to a central state agency, no win effect in some States, should be extended to cover all States of the Union.

Only a few States have compulsory school attendance laws that fit into the requirements of a program such as that outlined in this report. Assuming that provisions have been made for carrying out such a program it will be necessary in most States, in order to make it effective, to modify compulsory school attendance laws in two ways: (a) to provide for the compulsory education or training of the physically and of the mentally handicapped, and (b) to provide for the withdrawal of mentally handicapped children for placement in vocational training or employment without age or grade qualification when such children have reached the maximum of their capacity to profit from regular school training and when it is to the best interest of the child.

PROMOTION BY PRIVATE AGENCIES AND INDUSTRY

Research and constructive experimentation by private agencies and by industry are very much needed in the development of programs for the vocational adjustment of the physically and of the mentally handicapped. Comprehensive studies should be made of the possibilities for a proper utilization of the productive capacities of the various types of the handicapped, of the refinement of physical and mental measurements for determining their abilities and aptitudes, of the successive steps and specialized procedures essential in effecting their vocational adjustment, of the best methods for the integration of national, state and local educational, vocational, industrial, health and welfare activities in an effective plan of vocational adjustment.

PROMOTION BY THE NATIONAL GOVERNMENT

For a number of years the Federal Government has been engaged in aiding and promoting certain social welfare, educational and economic enterprises carried on by the States. If it is good national policy to promote vocational education and voca-

tional rehabilitation, it would appear to be an equally sound policy for the national government to promote the social and economic welfare of its handicapped children in order to have them participate fully in the life of the community. The wealth of the nation consists not only in its material resources but also in its human resources.

For this promotional service, it might seem advisable to designate the agency now charged with the vocational rehabilitation of the physically handicapped. This agency, it is believed, could readily extend its services to include the work of vocational adjustment of the physically and of the mentally handicapped child.

The function of this agency would be (a) to promote a complete program of vocational training and adjustment for all the physically and the mentally handicapped children and (b) to conduct such research activities as will further the interests of the handicapped.

Summary

Children who are physically or mentally handicapped constitute a large social as well as an economic problem.

Such children possess aptitudes and abilities which if developed through a constructive program will enable them to carry wholly or in part their own social and economic weight.

It has been amply demonstrated that it is feasible to prepare for and place the handicapped in useful and gainful employment.

Children who are physically or mentally handicapped are not peculiarly set apart from other children; their needs in general are the common needs of all children.

Meeting these needs, which include medical treatment and social, academic and vocational training, requires a high degree of cooperative effort on the part of the medical profession, social and health workers, educational authorities and employers whose services should be coordinated and directed so as to provide:

1. Early discovery and diagnosis.
2. Curative and remedial treatment.
3. Social contacts.
4. A differentiation of education with "vocation" as an important aim.
5. A service of educational and vocational guidance.
6. Pre-vocational training.
7. Vocational training.
8. Placement in employment.
9. Follow-up in employment.

The program for meeting the needs of the physically and of the mentally handicapped children includes:

1. A central state coordinating agency.
2. Creation of constructive attitudes.
3. Development of employment opportunities.
4. Protective legislation.
5. Promotion by private agencies and industry.
6. Promotion by the national government.

C-1. COMMITTEE ON THE SOCIALLY HANDICAPPED —DEPENDENCY AND NEGLECT

"Home life is the highest and finest product of civilization. It is the great moulding force of mind and character. . . . Except in unusual circumstances, the home should not be broken up for reasons of poverty. . . ." This was the most striking declaration of the 1909 White House Conference on Dependent Children. That Conference adopted a program, stated in words of common usage, which is in complete accord with the fundamental principles of social work as they are seen after 20 additional years of experience, study, and reflection. In memorable language, the elemental importance and value of the family as the basic institution of society for child care was made clear. The great task of all those concerned with child welfare, it was pointed out, was to secure, whenever practicable, unbroken care for children within their own families.

WHITE HOUSE CONFERENCES AND DEPENDENT CHILDREN

The Conference of 1909

The recommendations of the Conference of 1909 were both specific and general, and many of them have profoundly affected the events of the last twenty years. Among its suggestions were:

That greater provision be made for the assistance of needy children in their own homes.

That greater use be made of family care for children who must be removed from their own homes.

That child-caring agencies be responsibly organized and be inspected by the State.

That dependent children receive better medical care.

That a Federal Children's Bureau be established.

That an unofficial national organization for the promotion of methods of child care be established.

That prevention of child dependency is better than cure.

That the causes of child dependency be ascertained and, if possible, controlled.

That tuberculosis and other diseases be checked.

That family income be protected against sickness, accidents, invalidism, or death of the bread-winner, by systems of compensation or insurance.

And generally, that the conditions surrounding child life be improved.

To a surprising degree the aims and hopes of 1909 are achieving results in 1930. This is not due of course wholly to the 1909 Conference, but its approved program gave a powerful impetus to progress.

Today, the principle of the preservation of the home is fully established in the legislation of nearly every State in the Union as a public policy, while some 220,000 needy children are living in their own homes and cared for by their own mothers through the operation of mothers' aid laws. This is a greater change in volume and in method in 20 years than had occurred in the preceding century.

The Federal Children's Bureau was established by Congress in 1912. In its study of the many aspects of child dependency, this committee has been profoundly impressed by the beneficent influence which has been exerted in all portions of this field by the Federal Children's Bureau through its collection and dissemination of facts. To every person dealing with dependent children, who has wished to do wiser and better work, the Children's Bureau has been an agency to which he could turn for reliable data on the laws and practices of other localities, and for dependable, expert interpretation of such facts. This committee finds the volume of dependable information in regard to needy children, though still incomplete, enormously greater than that available in 1909. Beyond doubt there has been a constant and substantial improvement in the standards of care given to dependent children both in their homes and elsewhere.

The Child Welfare League of America is the type of national unofficial agency, for the promotion of better care of dependent children, suggested in 1909, and other national groups, nonsectarian, Catholic, Protestant, and Jewish, promote better standards and more adequate provision for helping needy children.

Conference of 1919

A second and somewhat similar nation-wide Conference called by the Children's Bureau at the request of the President, met in Washington in 1919, and dealt not only with child dependency,

but with a considerably wider field of child welfare. In three sections, it discussed:

1. Child labor and education.
2. Public protection of the health of mothers and children.
3. Children in need of special care (including dependent children).

Under the last heading, it considered, in addition to the topics dealt with in 1909, mental hygiene, juvenile courts, children born out of wedlock, rural social work, and scientific literature on child care. As to child dependency, this second Conference declared that, "The conclusions of the White House Conference of 1909 on the care of dependent children are reaffirmed in all essentials." It laid additional stress on adequate income as a fundamental necessity for the preservation of home life. It suggested that each State reconsider its entire body of child welfare legislation at reasonable intervals through a child welfare committee or commission created for the purpose.

Some of the important subjects on which the Conference of 1919 suggested action, and which are subjects of continuous effort by the Federal Children's Bureau, are not directly within the field of this committee's consideration, but have most important indirect relations thereto. Maternal mortality, for instance, is one of the great causes of child dependency. The system of Federal aid to state programs for the protection of maternity and infancy, advocated by the 1909 Conference, and carried into effect through the activities of the Federal Children's Bureau, was one of the most important efforts in the history of any nation to reduce the mortality among mothers in connection with childbirth, due largely to preventable causes, and incidentally reduce the volume of orphanage and child dependency. The public health movement during the past two decades, together with other factors, has greatly reduced the death rate from some important causes among men and women at the ages at which they are supporting and caring for families and children. A substantial body of legislation providing for compensation in case of industrial accidents has brought some degree of protection to home life in most States.

Needs to be Considered

There is no lack of opportunities for the further betterment of the lot of dependent children, awaiting consideration by this

third Conference. Vigorous and sustained action by voluntary and governmental agencies, and by all humane and public-spirited individuals, will be called for to carry into effect the conclusions which this third Conference may reach. Among the outstanding needs which will be considered in this report, we may note that:

1. Large numbers of children still suffer, unrelieved, in their own homes, or are separated from their homes, because of poverty.
2. There are many child-caring agencies without responsible organization, under no inspection representing the entire community, with inferior, inadequate staffs.
3. Even almshouses for the care of children, condemned 100 years ago, are still used in certain localities for this purpose.
4. Individuals and unauthorized groups receive needy children for profit, and oppose supervision by public agencies.
5. Large numbers of needy children, additionally handicapped by considerations of color, national origin, or mass migration, do not share in the provisions made by public and private agencies for dependent children.
6. Large bequests are tied to outworn methods of child care, while modern progressive methods lack adequate support.
7. Extraordinary opportunities for "prevention" of the causes which deprive children of parental care are availed of to only a slight degree.
8. Invalidism, accidents, irregular employment, unemployment, and insufficient wages leave hundreds of thousands of family homes without that adequate income which is essential to the maintenance of a home suitably equipped for the rearing of the citizens of the future.

In meeting these further needs of dependent children, the conclusions and recommendations of the White House Conferences of 1909 and 1919, which are hereby re-affirmed in all essentials, should be kept continuously in mind.

DEPENDENT CHILDREN AT HOME

Rooted in the past and reenforced in the present are those basic human relationships which come to their full flower only in the family. The family is the source and center of our most profound emotions and our most treasured traditions. Here are those contacts and interweaving of personalities which mankind instinctively craves. Individuals may seek escape therefrom but, as a rule, only to establish soon other family groups or relationships. The family in its present form has been deeply influenced by countless ages

of search for the best way of living. Its paramount importance in any program for the well-being of children is accepted by every group and class, and must be unless and until we disavow our fundamental philosophy of life.

The Family and the Child

The family is the richest medium for the nurture and development of the child. Where the essentials of family life exist, even incompletely, every effort should be made to keep the child with his own mother and father. Their home is his rightful place. The sense of "belonging" meets one of his own fundamental needs. He feels himself secure as a part of a stable and resourceful family group, in a world of strangers and of dangers. Almost certainly in later life, he will be a member of some family; what more important than to secure for him as a child this normal preparatory experience? Here he learns the meaning of loyalty, that fundamental factor in character. The child's own family sees him intimately, sees him under all circumstances and conditions, has a more continuous opportunity to understand him, is more certain to cherish a continuing confidence in him and to respect his aims and accomplishments than any other group. Parents add to these considerations an unquenchable loyalty and confidence, for nature gives to parents rose-tinted glasses in viewing their offspring.

The family does not lose its value by reason of the fact that every family has its difficulties and limitations. There is no one fixed pattern of a family. Family life is an achievement of the highest order. Its values become more potent, refined, and effective as the years pass. An individual family is not static. Resourceful and understanding social service, together with material aid when necessary, will nearly always enable parents who are in difficulties to increase the richness and stability of their family group and its beneficent influences upon their children. Inherent capacities of the father and mother as individuals to assume the responsibilities and privileges of adult life are fundamental in determining the results they may achieve in their child-rearing venture; yet, the very maintenance of the home itself and the quality of the family life within are dependent upon certain essential protections from the community. Many conditions exist which threaten them for great numbers of people.

The Family and the Dependent Child

The need of the dependent child for what his own family can give him is exactly the same in kind as that of any other child, but more urgent perhaps because of experience in hardship. The humane spirit, expressing itself through many types of channels, governmental and unofficial, has never wholly lost sight of this objective. Aiding needy children at home was not new even in 1909. Home relief to families with their children has been given chiefly by three agencies: General public out-door relief officials; mothers' aid (widows' pension) agencies; unofficial family welfare societies and voluntary relief agencies.

General Public Home Relief

The poor law was the original expression of a decision by the people that no one in their midst should be allowed to starve. The poor law official was the agent through whom that humane purpose was to be carried into effect. In essence, and with important qualifications, the poor law was not without important similarities to a generalized social insurance. Those in need were to be helped, and the cost was to be distributed among the entire population. In theory, and in law in most States, the poor law officer has always had ample authority to give sufficient aid to widows, to deserted mothers, and under all other circumstances of need, to enable families to keep their children at home. That the poor law has not accomplished this result has been due to parsimonious appropriations, uncomprehending administration, and the social stigma, actually or potentially, attached to public relief, thus preventing application for aid by the more sensitive of the needy.

The history of mothers' aid legislation and administration by a separate authority for this type of relief, apart from the poor law, has shown that these shortcomings are not necessarily inherent in public relief. Although these newer agencies enable many needy mothers to keep their children at home, there are still large numbers of families in which there are needy children, not eligible to mothers' aid relief, but who are eligible to receive and in some cases do receive public aid at home through the poor law or public welfare authority. As to definite knowledge of numbers so aided, the types of relief, and results, this public home relief is still the "no man's land" of public welfare.

To bring general public home relief to families in which there are children, up to the standards of the best mothers' aid administration and measurably up to the standards of unofficial family social work, is one of the greatest needs and opportunities in improving the care of dependent children in the immediate future. Private funds are unequal to the need. Whatever forms of workmen's compensation or social insurance may be devised and put into effect, the poor law official will remain the residuary legatee of that vast group of families, whose particular circumstances do not fit into the requirements of any of the special types and forms of social aid.

Mothers' Aid

The declaration of the White House Conference of 1909 that children should not be separated from their parents because of poverty alone was in a sense a truism, but in fact it recalled to a great array of public officials, child-caring agencies of all sorts, and relief societies, a vital principle of action, which, accepted in theory, had been forgotten by many of them in practice. This occurred often under the stress of financial pressure, funds being available, public or private, to assist children away from their homes but not to assist them in their homes. Only two years after 1909, the principle that children should not be separated from their widowed mothers was enacted into law in 2 States, Illinois and Missouri. Its administration was entrusted to powers other than the poor law authorities, and ampler funds were made available. The speed with which legislation of similar type found its way upon the statute books of 44 of the 48 American States, the magnitude of the operations thereunder, the sums provided, and the extraordinary vitality of public sentiment demanding the enlargement of this type of relief and resisting any curtailment or considerable departure from the original plan, are perhaps the most notable and dramatic chapter in the history of relief in this country.

Last year, 33 States whose figures are available spent more than $30,000,000 keeping, by means of this legislation, an average of some 220,000 children with their mothers. It is difficult to comprehend fully the significance of so great a change. Many thousands of these children, except for this aid, would have been taken from their homes to other types of care. A substantial majority of the mothers would have attempted to support their children under severe strain and poverty. The cost of this is paid for later in

inefficiency, ill health, and personality and behavior problems which inevitably follow when a widowed mother, without resources, strives to be both bread-winner and home-maker for a family of children. It may now be said that any State which fails to provide the framework of legislation authorizing mothers' aid will be looked upon by her sister States as backward, and any community which fails to make adequate provision to carry out such legislation will be regarded by her sister communities as backward.

It is not too much to say that experience has shown that this form of mothers' aid can, with few exceptions, be kept apart from partisan and political considerations, that the stigma of public relief can be avoided almost wholly, that appropriations permitting adequate relief can be had, that trained personnel can be secured, and that its standards can be made comparable to those of the unofficial relief agencies.

The picture is not without its shadows. In many States, a statewide law is carried into effect in only a few localities. Adequate relief, based on a well-considered family budget, is an ideal realized in some localities, but not generally. Home relief at the expense of the tax-payer cannot always compete successfully when free care is available from private endowments or contributions for the children away from their homes. Mothers' aid legislation began conservatively by narrowing rather sharply the group of mothers eligible therefor. It has been made more inclusive in many States, but is still far from realizing a full application of the principle that poverty alone should not remove the child from its parents.

Unofficial Family Welfare Agencies

The welfare of needy children and the preservation for them of care in their own homes owe much to the creative thinking and courageous action of leaders in the field of family social work. These agencies, established in one or more cities in nearly every State, have long been among the primary child welfare factors. Their principles are in harmony with the conclusions and recommendations of the White House Conferences of 1909 and 1919 as to the best methods of care for dependent children. Last year, 204 of the leading voluntary family welfare agencies in the course of the year gave service or aid or both to 380,000 families containing 750,000 children.

The chief function and objective of family social work is the

development of the capacity of the family for satisfactory and self-supporting family life. Family social welfare agencies have always emphasized the solidarity of the family and have thereby made a great contribution to child welfare. Their aim is to keep the family together under ordinary circumstances and to foster and develop in the home a favorable environment for the growth and development of the child in all respects. These are precisely the objectives of the best child welfare agencies.

Through its closeness of insight into the lives of thousands of individual families, family social work has built up a body of knowledge from which should come a real contribution toward education for parenthood, and a broader appreciation of the forces which make for successful family life.

Family case work service to ex-service men and their families, and in certain communities to other families, is included in the Red Cross program. The Red Cross Civilian Home Service program has been very closely related to the needs and activities, public and private, of each community. It is organized chiefly in rural areas where no similar organization exists. The workers are doing a generalized type of case work, for in many communities the Red Cross worker is the only case worker in the community and often in the county.

When disaster strikes a community, all normal activities of living are temporarily suspended. When lands, employment, buildings, business, and even life itself are destroyed, there are many citizens whose entire savings and resources are lost. They can not regain their position in the community without prompt and adequate assistance. The Red Cross is the one national agency which gives aid immediately to stricken communities.

Day Nurseries

The 1923 United States Census reported 613 day nurseries, caring for about 23,000 children. There has been little change in these totals. Day nurseries specialize in the care, during the day only, of children of economically handicapped working mothers. Families seeking their service present problems similar to those dealt with by family and child-caring agencies. Each individual child should be studied in the light of how his mother may best care for him, and plans for him should carry concern and responsibility for his entire family. Mothers are rarely able to care properly for three or more children and also work away from home.

Nurseries should not play the rôle of wage supplementing agencies. They are urban agencies and therefore much affected by industrial conditions because their clientele is in the lower-wage groups. Nurseries when widely used can be made to serve effectively in the solution of certain family problems, in the upbuilding of the health of children, and in their proper training. By close contacts with the family they can also raise its standards in these matters.

CHILDREN BORN OUT OF WEDLOCK

Enlightened public opinion has accepted the principles that every child is entitled to good care and education. His right to a healthful life and an adequate opportunity for growth and development exists irrespective of the circumstances of his birth. Birth out of wedlock inevitably implies handicaps and difficulties for the child. The child so born rarely has the care and love of both parents and frequently of neither. He is more likely to be exposed to physical neglect than other children. Recent studies have shown that the death rate of children born out of wedlock is approximately 3 times that of other children. Lack of economic protection and continued personal responsibility makes them victims of frequent transfers from one kind of care to another. The child, failing to get continuity of training and affection, often develops the feeling of being unwanted. Many come later to social agencies as dependent or delinquent children.

The extent of the problem is indicated by the following figures: The United States Census Bureau for 1928 reported 63,942 illegitimate births for 42 States. In the birth registration area of 1927, there was one illegitimate birth for every 35 of the total population; one in every 61 for the total white population. The rate for the total Negro population was higher.

Agencies doing constructive work for unmarried parents and their children recognize that a sensitiveness to the whole human situation of the father, the mother, and the child in relation to their social and physical environment is essential. Social treatment has to be adapted to the individual need and situation. Hasty and ill-considered separation of children from their mothers causes unnecessary hardships.

Marriage for the purpose of giving the child a name, when not based on mutual respect and affection, and when there is no desire or intent on the part of the parents to live together as married

people, tends to complicate rather than to simplify the situation, and therefore, rarely offers a solution. Unmarried parents, as other parents, should take responsibility for their child. Whenever possible, provision should be made so that the child can stay with the mother, particularly during the nursing period. If circumstances are such, however, so as to make it impossible or undesirable to have the child in the immediate custody of the mother, other practical provisions may be made, but the mother should be helped to take, to the limit of her ability, the responsibility of planning for him and assisting in his care. The father should give financial support in regular instalments. As yet, relatively few children born out of wedlock receive any support from their fathers, and when support is received, the amount is usually inadequate.

Illegitimacy is chiefly a problem of youth. The great majority of mothers are under 25 years of age, and approximately half of them are under 21. While a large proportion of the fathers are young men, their ages are somewhat higher than those of the mothers. One immediate concern is to assist in the modification of conditions which tend to stimulate illegitimacy. Progress will be more rapid if we view it primarily as the result of biological, economic, and other social influences.

Provision for unmarried parents and their children should include:

(1) An agency with a staff equipped to give the mother sympathetic understanding and encouragement before the birth of her child, to give aid in making practical plans for proper prenatal and confinement care, and to assist in initiating and following through legal proceedings whereby she may gain support for her child from the father.

(2) Persons with special skill, knowledge and insight to whom the mother can turn for help in working out plans for the child and herself. This involves consideration of the feelings and capacities of the people concerned, resourcefulness in evolving ways by which each individual's well-being can best be promoted, and an acceptance of the fact that frequently help has to be available during a long period of time.

(3) Extension, improvement, and enforcement of laws for establishing paternity and for the support of the child by his father.

(4) Safeguarding the birth registration records so that the fact of illegitimacy will not become public or common knowledge.
(5) Good facilities for the placement of children born out of wedlock, and the elimination of such work by unscrupulous, commercialized maternity homes and uninformed persons.

CHILD DEPENDENCY AS AFFECTED BY RACE, NATIONALITY, OR MASS MIGRATION

Negro, Mexican, Porto Rican, and Indian dependent and neglected children present special problems of great importance. Public and private agencies for dependent and neglected children have not concerned themselves, as a rule, with children of these races and nationalities. Custom, tradition, recent migration, and other special factors of race or nationality, call for specialized methods of meeting those needs which are common to all. Failure to understand this has resulted in neglect of certain groups and lack of the needed specialized care. Mass migration always creates serious problems of housing, community adjustment, education, recreation, child care, and the like. In some areas these problems have not been faced and dealt with by either public or private agencies.

Adequate incomes, wholesome living and working conditions, protection of health, and good standards of child care in their own homes and also in foster families and institutions, are as imperative for these special groups as for the general population. These facts, accepted in theory by leaders in health and welfare work generally, are far from being realized in practice, and far from being understood by the general public or, in many instances, by its official representatives.

The Negro Child

The Negro constitutes one-tenth of our total population. His widespread migration in the past 20 years from rural to city life has added many new complications and also offered many new opportunities. There are now 6 cities in the North and 1 city in the South with a Negro population in excess of 100,000 each. Pressing into city life and city jobs, he is willing to work for wages only slightly above the low returns he received in his former home from agriculture.

The Negro dependent and neglected child comes out of a back-

ground containing these elements: The Negro is America's marginal worker, and more likely to be unemployed than the white worker. In the South, the Negro receives lower wages for unskilled work than the white laborer. In the North, for unskilled labor, he receives about the same wage as the white man. In neither the North nor the South does the Negro have any considerable access to the ranks of skilled or organized labor. The proportion of married women working away from home is 5 times as high among Negroes as among whites—a very significant fact in relation to child dependency and neglect. The general death rate is 62 per cent higher for Negroes than that for whites; the tuberculosis rate is from 2½ to 4 times as high. The infant mortality rate among colored is approximately two-thirds above that of the whites. Rents are higher for Negroes than for whites. In cities, there is housecrowding to an alarming degree. Negroes are not lacking in desire for normal family life and cultural advantages for their children, but they cannot attain (under such social and economic limitations) the prevailing standards in the cities where they live. In spite of all this, the Negro is making great progress. For example, home ownership among Negroes in the North has doubled since 1920.

Resources for social welfare work among Negroes are everywhere inadequate. Though the economic security and reserves of the Negro are substantially less than for whites, facilities for family relief and child care in case of need are meagre in the Northern cities as well as in the South. Many agencies caring for needy white children receive no colored children. Mothers' aid grants to Negro families are very limited in number and amount.

High as is the Negro dependency rate, it is lower than might be expected for other races or nationalities in similar economic circumstances. The independence of the Negro family and the tendency of relatives and neighbors to help in any need are notable characteristics of the race.

More adequate provision for the aid of colored children in their own homes by both public and private agencies is needed. The development of resources for family care of dependent Negro children by boarding out and free placement will reduce to a minimum the troublesome problems which arise in all forms of institutional care where the several races are handled under the same roof. Fortunately, an increasing number of trained colored social workers is entering the field each year and through them methods of care more flexible in scope and sensitively adjusted to their own racial needs

may be expected. As the economic condition of the Negro improves, dependency and neglect in his group may be expected to diminish.

The Mexican Immigrant Child

Disturbed political and economic conditions in Mexico and the direct appeal made by industries and agriculture in the United States for Mexican laborers have resulted in the migration of such great numbers that there are now from 2,500,000 to 3,500,000 Mexicans living within our borders. They have settled chiefly in the Southwestern States. In California there are 500,000, but many have followed the lines of transportation and are scattered in small groups through Colorado, Illinois, and Minnesota. They work chiefly in low paid jobs and relatively few better opportunities are open to them. They are largely nomadic, chiefly because work opportunities are seasonal and in remote places. At least one-third of the time of the average Mexican worker during the agricultural season is consumed in moving from place to place as work offers.

The immediate results are disastrous to the children and to family life. It is estimated that in California, 85 per cent of the Mexican children are in migratory schools and follow the crops part of the year. When in cities, they live in isolated, over-crowded, unsanitary districts. Their poverty and consequent low standards of living have their natural results in excessively high sickness and death rates. One-tenth of all state aid in California for care of children in their own homes is now paid to Mexican families. As residence qualifications for this aid render many needy Mexican families ineligible, it evident that poverty and need are proportionately more common among Mexicans than among the general population of the State.

The Mexicans have large reserves of self-help and cultural values of high quality. The volume of dependency among the Mexican laborers will be measurably reduced as they find more regular employment at higher wages, better housing facilities, improved health protection, and opportunities to participate actively in the general life of the community.

The Porto Rican Child

The serious economic and social conditions now existing in Porto Rico are primarily responsible for the rapid and wide-spread immi-

gration of Porto Ricans to this country, chiefly to New York City and vicinity, where there are now 150,000 Porto Ricans, a number increasing each week. Leaving Porto Rico because of extreme poverty, their meagre or almost non-existent resources are quickly exhausted. They are susceptible to disease, and adjustment to the northern climate is to them a severe strain. Unskilled, uneducated plantation laborers, migrating to a great city, must inevitably start at the bottom of the labor market with low and uncertain income.

Our responsibility to the Porto Ricans cannot be questioned. This is their home if they choose to come here. Their problems are far more acute than those of most other immigrants, but the solutions are similar in nature. Opportunity must be given to them to secure at least reasonably sanitary housing, to profit by recreational facilities, to share in the benefits of labor legislation, to secure protection in the courts, to receive the benefits of public health programs adapted to their special needs, to receive instruction in child care, to be protected from harmful work of women and children, and to make the acquaintance of social and political institutions. Social workers with a knowledge of the language, character, and living conditions in the home lands of the Latin-Americans are an important factor in the programs of case working agencies giving service to Porto Ricans.

Prevention of child dependency and neglect in this country must, however, reach back to measures that will affect vital economic and social changes in Porto Rico.

The Indian Child

A highly complex child-caring situation is found among the Indians. In a population of 85,000 children of school age, about one-third are in institutions receiving free board, lodging and care, as well as education—commonly spoken of as "boarding schools." Children in these schools are separated from their parents when very young and remain away for long periods until they and their parents become virtual strangers to each other.

There are wide differences in the economic and social conditions of the Indians, but the vast majority of Indian families are very poor. The old Indian methods of living have been almost completely destroyed, without much constructive effort to adjust Indians to changed conditions. A large proportion of Indian children grow up in families in receipt of relief (free rations) or in

institutions, either method eliminating any opportunity for the work motive and tending to encourage dependency.

The care of dependent Indian children is highly complicated by reason of the extreme destitution in Indian families, the bad health conditions, the extremely poor housing, the conflicts between their racial customs and traditions and the customs and demands of a modern civilization in the midst of which they must live. The so-called boarding school, seeming to offer a way out of some of these difficulties, leads into other and perhaps even more serious difficulties. Congregate care in institutions for such long periods can not fail to have serious effects on character, initiative, ability to form established family units, and to affect an adjustment to new modes of life.

Methods and standards in the care and education of other children, which have been worked out through long experience in many localities, should be adapted to the special needs of the Indian child. To what extent and in what manner these children can advantageously be cared for in their own homes; under what circumstances they should be removed to institutions; whether the young children at least should remain at home or should be educated in institutions; and how these children approaching maturity may be adjusted to a stable community life—all are questions whose solutions require the utmost ability, skill, and professional training of social workers.

THE CORRECTION AND PREVENTION OF NEGLECT OF CHILDREN

Most parents provide care for their children according to their knowledge, ability, and means. To treat cruelly or neglect a child violates a very fundamental human instinct. The proportion of children who are abused or wilfully neglected is small, but the aggregate number of such children mounts into the thousands. Every locality in the United States has the problem in its midst.

Child protection is a proper function of Government. It involves the enactment of suitable legislation declaring a public policy upon the subject, and conferring adequate authority upon courts and law enforcement officials. These laws and official duties, however, are often enforced only in rare instances of a spectacular nature, unless there be in the community some public authority or private agency charged with the special duty of promoting the

effective enforcement of these laws, as well as utilizing the existence of the laws and their potential application as a leverage for correcting or preventing the abuse and neglect of children. The development of child protection has been due largely to the initiative and continued activity of voluntary agencies which, in many instances, have framed and proposed the necessary legislation and have assisted law enforcement officers in its application. Cruelty to children was the most spectacular form of abuse, and its prevention was the stimulus for the organization of protective activities for children.

The grosser forms of physical cruelty are no longer as prevalent as they were a few decades ago, but the agencies concerned with child welfare and family welfare have discovered that there are many other forms of neglect and abuse. The more common forms of neglect are failure to provide sufficient food, suitable clothing, proper living conditions, and needed medical and surgical treatment on the one hand, and on the other, exposing children to immorality and immoral associations.

The Development of Protective Agencies

The movement originated in large measure with the passage and enforcement of various fundamental laws for child protection in the various States. At the beginning, law enforcement and punitive treatment were the principal parts of the program, but in the later development of child protection, an approach at the incipient stage to these evils has become possible. With a better understanding of causes, a program of prevention is practicable. Child neglect, both on the part of the family and of the community, is in a considerable degree preventable. The preventive program approaches neglect and abuse at an early stage; it seeks the social and economic as well as individual factors; and by education, advice, persuasion and assistance, it aims to prevent the necessity of compulsion. When it is necessary to take extreme measures, child protection agencies are equipped, through a personnel trained in the use of the law and legal machinery for a social purpose, to bring the legal forces into effective action for discipline and punishment.

Child protection is a distinct form of social service to children. It attacks the various problems of child neglect and abuse from the standpoint of parental and community responsibility for care and protection. Deeper knowledge of personality and behavior

problems, and discovery of the frequency of mental defect and mental disturbances among parents and others who neglect or abuse children, have led to more intelligent treatment. There has also come an appreciation of the importance of dealing with the underlying causes. The field of child protection now includes the correction of community conditions that lie back of much neglect, and menace child life both at home and away from home, especially certain objectionable forms of commercialized recreation and contact with various forms of vice.

The protective movement was started largely by private agencies. Since the organization of juvenile courts beginning in 1899, child protective work, in addition to law enforcement, has been undertaken by some of them. A more promising development for organization of child protection on a preventive basis is its inclusion in the program of state and local units of child welfare, which can reach the problem at an earlier stage and in large measure prevent the tragedies attendant upon the breaking up of families because of flagrant abuse and neglect of children.

There are about 400 agencies for child protection in the United States. Most of them local. The majority combine work for animals and children, and in these the work for the protection of children is apt to be given less attention than that for animals. In the main, these agencies have small staffs composed of untrained and inexperienced workers. It follows that large areas are without any protective service. Many of the simpler forms of neglect are successfully dealt with by family or other children's agencies, but for every community there should be available the services of a special agency, not directly connected with the court, but in close cooperation with it, to handle the more complicated cases. These agencies may include non-judicial boards of public or child welfare, domestic relations courts, or social work divisions of police departments. The chief consideration is that a responsible agency, not necessarily a specialized protective agency, safeguard this part of each community's child welfare program. The tendency for protective societies to combine with child-caring societies is sound and should be encouraged. Only specially trained persons can deal successfully with the complicated problem of neglect and abuse.

CARE OF DEPENDENT CHILDREN AWAY FROM HOME

Mankind approaches the child deprived of the protection of its own family with peculiar interest and tenderness. There is inspired a desire for action which transcends the bounds of race, class, and creed. It is a valuable quality of man that impels him to overlook or to forget the sordid things of life before the presence of a child. When the child for any cause has to leave its own family, facing deprivations which spell disaster, there swings into action a power which is difficult to guide and one which cannot and should not be suppressed. Of the essence of religion—embedded in the deepest fibre of our being—it has created and supports a great number of institutions and societies which care for children. These agencies, some public, some private, are part of a great network of service.

From the very earliest Colonial days, public authorities and sympathetic individuals have cared for dependent children. First in almshouses and by indenture to families, later in institutions or "orphanages," and through varied forms of foster family care, increasing numbers of children have been sheltered and protected.

The institutions are of many types, some having small cottages, and others large congregate units of care. Some are directed and staffed by highly experienced and competent social workers, insuring adequate social, health, mental, educational, and recreational safeguards for the children. Others are less well equipped for their work. There are also many foster family agencies with varying standards. Foster family care includes the placement of children in families where reimbursement is made for part of their care; in others where children are legally adopted; and in still others where the children are given free care, or, as in the case of certain older children, provided with work opportunities.

About 1,500 institutions and 350 child placing agencies cared for approximately 250,000 different children during the past year, one-third of the children being in foster families. They expended a total of approximately $60,000,000.

Much has been accomplished in the past 20 years in behalf of children who have been deprived of their own homes. Much more needs to be done before each dependent child can be assured of receiving that most important of all considerations—the kind of care that is suited to his individual need. The determination of what this is must be based on the requirements of the child in

terms of his individual family relationships, community relationships, his health, his capacities, and the subtle deep-seated needs of his own soul. To know these factors concerning each child and to shape his care in accordance with them should be the aim of every child-caring organization.

From this it will be seen that all standards of child care rest on two basic factors: (1) A trained and competent directing personnel; (2) the right methods of social work. All other considerations, such as plant, equipment, and endowment are of secondary importance. Executives and staff members must have special social case work knowledge and training requisite in this field. Child care should be based on intensive study and individual treatment—the essence of social case work. Disputes as to the relative merit of different types of foster care disappear where these conditions hold. A growing recognition of the essential "oneness" of all child care has led to important changes within the field.

In a community which has no child welfare or child-caring agencies any event arousing special interest in needy children is likely to crystallize immediately in some highly specialized activity. A far wiser course would be to begin by making sure, with the aid of a thoroughly trained social worker, that all kinds of aid needed by families in which there are needy children are given to such families, thus utilizing first the valuable asset of existing family ties. In certain instances the families may prove to be unable to provide, even with aid, the kind of care which the children require. The next simplest step is to provide for these children in other family homes, which can readily be done by the payment of board for them. After these two lines of effort have been carried on for a few years the actual child caring needs of the community can be more accurately measured and more permanent plans may then be adopted suited to the continuing needs of the community.

Transition in Forms of Care

Such data as are available through the Federal census enumerations at intervals show a decline in the number of children in institutions in relation to the general population of the country since the census of 1910. This decline coincides with the development of public aid to children in their own homes, through which, almost as large a number of children are now receiving aid as the whole

number provided for by institutions and agencies. Relatively few new child-caring agencies have been created in recent years in the old centers of population.

The decrease of institutional care may also be ascribed in part to the increasing use of boarding homes and other forms of care in family homes. To this development of a broader program of child care, institutions themselves have contributed greatly. There has been a transition within the structure as well as a substitution of new forms. In this reorganization a considerable number of institutions have discontinued or diminished their activities, these being in some cases recently organized and poorly supported ventures. Among the older institutions, there have been many changes, mainly changes in the form of service.

Fortunately, many organizations are free to exercise and do exercise a large degree of flexibility as to the types of children who may be received and as to the methods by which their individual needs are met. But some organizations, either by the terms on which their funds have been received, or the terms of their charters, are limited sharply to particular types of children and to particular methods of care. Others so limit themselves by reason of the preconceived views or lack of experience and knowledge on the part of boards of directors, or executives and other staff members.

Encouraging progress has been made. Many old time congregate institutions have been rebuilt into cottage groups and have moved from crowded city streets into the suburbs. Others have altered their large buildings so as to provide for care of their children in small groups, each group having its own facilities. In many instances, schools within the institutions have been discarded and the children attend neighborhood schools and take part in other forms of community life. Institutional populations have been cut down by expansion of the field of service to include boarding home care and placement of children in free homes. Development of foster family care as part of the work of institutions has proved sound where executives and staff members have sufficient experience in foster family work. Some institutions include in their program the assistance of dependent children in their own homes when this is found to be better for the child than care away from home.

Likewise, some of the old time child-placing agencies that formerly devoted themselves entirely to supplying free-home care, mainly for the purpose of adoption, have developed boarding homes

for temporary or long-time care, and also assist children in their own homes.

Thus, many important child-caring organizations use two or more methods of care according to the needs of the children. Where the agency operates with a skilled staff and has an understanding board of directors, its services are flexible and tend to provide the type of care which is suited to the needs of the children.

Increasing emphasis is being placed on investigation before acceptance for care because of a better understanding of the possibilities of preserving the child's own home and of the necessity of knowing the child's individual needs. This improvement in study of the child and his family will inevitably lead to still greater facilities for keeping children in their own homes and to further changes in the types of foster care provided.

Good standards of social work for children are bound to disappear where the procedure as to admission and retention is loose or casual. There should be a clearer recognition of the dangers on the part of agencies of accepting as final the routine commitment or assignment of children by courts or public welfare officials with little or no data as to personal and family histories of the children —their health, personality, schooling, and other social history. The institution or agency should preferably enter into the plans for the child at the earliest possible moment in order that there be the most efficient use of its resources. The skill and consideration shown at the time of admission will have a determining influence throughout the rest of a child's life. Foster institutions and agencies should never surrender to any outside organization or person final authority as to whom they shall receive or retain.

More staff and board members are seeing that there is apt to be a close relationship between the size of an organization and the quality of its work. A foster care agency or institution can be too large. Happily, the tendency is for child-caring organizations to limit their size and reduce the number of children for whom each worker is responsible.

Closer cooperation and appreciation exists between supervising state boards and the child-caring group, resulting in better standards and wider community understanding of the work. If we are to have readily available any worthwhile body of up-to-date knowledge on child dependency in this country, which would throw light on many phases of the problem, some method of securing more complete and uniform reports to some central agency must be estab-

lished. The Federal Children's Bureau, with and through the state departments of welfare, is the obvious agency for the collection of such information. After many years of trying various methods of dealing with child dependency, after caring for unknown thousands of children, and spending unknown millions of dollars, we now have only a few facts and many guesses as to what has been accomplished or whither we are tending.

The Task of Foster Care

Children receiving "foster" care away from their own homes, in institutions or in families, range in age from early infancy to later adolescence. These boys and girls are of all religions, nationalities, races, and possess every kind of capacity and variety of personality. A very small proportion—orphans, foundlings and abandoned children—have no families left as a background. Another small group has families or fragments of families so unsuitable that the children have to be provided for permanently away from them. The vast majority, however, return to their own families within a few years.

The care given this last group of children should be planned in the light of conditions in their homes, the period of "foster care" for each child being regarded as an episode or chapter in the child's life which has a constructive relationship to his past and to his future contacts with his own people. While the child is away from home, the relationships between him and his parents should be strengthened by means of social work. The temptation to underestimate inherent resourcefulness and worth of own families must be overcome. Appreciation of the values which own families have for dependent children often averts estrangements. Since close relationship between parents and children is one of the important factors in the vast majority of cases, plans for the care of the child should be influenced by the accessibility and proximity of the institution or family home to the child's own home. In the making of such plans, the opportunities provided for the rehabilitation of the child's family to prepare for his return to them as soon as possible should also be seriously considered.

For the child who has no parents or whose parents or close relatives are unable, unwilling, or unfit to assume parental relations, it is important to determine this fact at as early a period as

possible, and to find for him the type of foster care in which he is most likely to receive not only good care and training but also lasting happy personal relationships.

Whether the foster care of a child is to be for life or only for a short time, certain fundamentals must be considered. Each child is primarily a human being with a distinct personality of his own. His individual make-up becomes one of the chief guiding factors in the formulation of plans for his welfare. No two dependent children are any more alike than are any two other children. Thorough investigation and study of the child's personal and family backgrounds, his health and mental capacity, are essential as a basis on which to plan for him. Focus should be on the child as he actually is, and on his capacity for growth and development, and not on any preconceived idea of what one would think his heredity or environment might have made of him.

Those in charge of foster children must be fully aware of the child's feeling about the people with whom he has lived and their effect on him. His experiences in his own family have a vital significance for him. He is profoundly influenced in his physical and emotional life by his relations with his father and mother and the intimate family about him. Only as there is recognition of these influences can we determine whether the task of foster care is to be one of carrying on the good work begun by the parents or of modifying and correcting destructive influences.

Most of the children have been exposed to destructive influences for long periods. They have had little stability in their environment. They have known physical privations. Many of them have suffered the loss of a parent through death, desertion, or prolonged mental or physical ill-health. The processes of rebuilding and reeducation are slow and more than the ordinary amount of time, understanding, knowledge, and skill are needed to affect changes in the children.

A large proportion of dependent children are in need of special health supervision and treatment. To meet this need the standards of health work have been improved in both institutions and agencies. It is recognized that the well child should be in an environment offering good living conditions. In deciding on care for the child who is ill or in need of medical treatment, two factors have to be considered: his own need and that of the children with whom he would have contact.

Religion is a fundamentally constructive element in life. Its

value is clearly shown in the way it helps people to deal with the contingencies of life. By stressing the inherent worth of each individual, religion becomes a potent factor in the promotion of social unity. Its insistance on the virtues of charity and justice forwards the recognition of individual responsibilities and rights and makes for happy and stable family life. Various religious traditions are represented among dependent children. It is essential for a child to live in an environment where the religious traditions of his own family will be conserved and where he will be trained in the religious life and duties of his particular faith.

The education of the dependent child should be as good as that which the community provides for all children. His training should be based on a sound understanding of his intellectual capacity and special abilities and needs. It should develop his creative talents and prepare him for economic usefulness. Dependent children vary in their capacity to take education and in their aptitudes and abilities to respond to specialized training. Similarly, schools differ in their programs. It is important therefore to choose for a child an environment in which the school program can be adapted to his special needs. Consideration should also be given to adequate recreational facilities and to opportunities for creative leisure time experiences.

A child is apt to feel more at home with people of his own color or national background and where the feelings of his race or nationality are respected than in an environment foreign to him, and he will, therefore, be happier if so placed.

While it is essential for a child to have in the place where he lives good minimum standards of physical equipment and environment, the human and personal environment surrounding him is of even greater importance.

The standards of foster care should be in general those represented by the better average of the community from which the children come. The idea that any kind of shelter in which children are kept warm, fed, and clothed is "good enough," implies a failure to recognize our opportunities on behalf of future citizens. A "de luxe" standard, however, which is markedly above that of the average, can only be followed in isolated instances.

A particular type of care may have particular advantages at a particular time, but human beings and human relationships are not static. The child grows and changes. The situation in his own family may be radically altered. If these constantly changing

conditions are to be met, facilities have to be flexible enough to permit modification in procedure.

The placement of a child in an environment where he will be happy and develop his capacities is both an art and a science. The selection of a family or an institution which will conserve and protect his interests is not a matter for small routine formulae. The human relationships involved are too complex and too changing to lend themselves to any rigid treatment. We must not put our trust in any panacea or one rigid system of care. We must be sure to discover the inherent capacity for development in the individual child and use to the utmost all available personal, family, and community assets for his growth.

Importance of Liberal Terms for Child-caring Endowments

Child-caring institutions and agencies are exempt from taxation because they are expected to do work which would otherwise have to be paid for out of public funds. No community has enough money for all welfare needs. There are many agencies with large resources which confine themselves by choice, or in excessive deference to the precise terms or apparent intent of an endowment, to the narrowest and least helpful types of work. The records show, however, that child welfare agencies are being permitted in great degree by the courts to do the most fundamental types of work. Many millions of dollars call for such release to secure the better care of needy children.

Here again prevention is better and is more certain than cure. An ounce of careful thought and expert advice on the part of a prospective donor of a large sum to found or carry on a child-caring agency, is better than a pound of effort many years later to convince a court that some modification of the application of the income from a narrowly restricted trust is necessary. Gifts and bequests for child care are to be encouraged, but all practicable steps should be taken to bring to the attention of prospective donors the very great importance of leaving the precise methods of the application of such funds to the wisdom of the future by making the terms of such gifts or bequests general, rather than specific. Corporations engaging in child care for like reasons should state their purposes in general and inclusive terms rather than in narrow and exclusive objectives. Purposes originally stated in narrow terms may well be extended by charter amendments. Donors of

large gifts or bequests may well favor child-caring agencies with general and flexible purposes, rather than those having narrow and highly limited objectives.

The man who has accumulated riches, but has had little contact with child-caring agencies, is apt to have rather vague ideas as to what dependent children need, though he seldom hesitates in the precise measures he undertakes or prescribes for their care. Out of his limited experience have come some of the finest and also some of the worst agencies for the care of children. Often, with insufficient knowledge, and swept by emotion arising from some unusual personal experience, he has spread rigidly organized, richly supported, but fundamentally unwise, plans of child help before the world. Yet, men in similar circumstances have, when well advised, so planned for the welfare of children that through the ages this spirit becomes for them the very breath of life.

CAUSES AND BACKGROUNDS OF CHILD DEPENDENCY

The preceding review of dependent children in their homes and elsewhere might arouse, at first thought, a feeling of satisfaction that so many forms of relief and care have been developed by so many agencies, and with such large resources. The slightest reflection, however, must result, not in a sense of agreeable satisfaction, but in one of profound regret and disappointment that there are still such tremendous numbers of children needing aid in their homes, and care away from them. In spite of the extraordinary progress in science, in public health, in medical practice, in improved standards of living, in the wide-spread development of an attitude of greater sympathy with the less fortunate and of a greater sense of solidarity of interest, there is still this enormous annual product of need and dependency among children.

Questions inevitably obtrude themselves, such as: What are the causes, factors, and backgrounds which constantly renew in such magnitude the problem of child dependency, and are these causes and factors in any degree subject to conscious social control?

These causes and factors are plainly visible. Any person of mature years and of some reflection, looking about him in the community, can readily observe the causes of child dependency. Some of them are obscure in their origins and in their modes of action, but they stand out prominently in view. They rarely operate singly, are not sharply separable one from another, and present

different aspects from different points of approach. They range all the way from the most intimate and personal qualities of individuals, such as those which make it difficult for them to adjust themselves to a family group, to find a job or to keep one after they have found it, and make it difficult for them to adjust themselves to social and economic conditions and changes of state-wide, nation-wide, and even world-wide scope. Prominent among these factors are sickness, mental disturbances, accidents, premature death, irregular employment, unemployment, and insufficient income when employed. These will be briefly considered in this order.

Sickness

Sickness is a large factor in reducing family life to a level at which it can no longer provide all the things that are necessary for the normal development of children. Sickness lessens income and increases out-go, thus doubles the difficulty of making both ends meet. It produces a condition of overstrain, and thereby qualifies the harmony and efficiency of home life. Its dragging weight is felt at some time in practically every household, and it disrupts in huge numbers the best plans and most devoted efforts for the maintenance of a normal home. In case of long continued illness, such as tuberculosis, it exhausts the resources of the family, makes them dependent upon public or private aid, and makes impossible that wise investment in the health, recreation, and education of children which is their best assurance for future usefulness.

An estimate in 1928 of the costs of illness to the people of the United States, including loss of wage during illness (but not including future net earnings lost on account of premature death), was on an average of $31.08 per person, or $134.88 per family per annum. This amount would mean, in countless instances, a deficit in what otherwise might be a satisfactory family budget for the year.

The social loss involved in the impairment of the qualitative value of the home is not susceptible of like measurement, but is obviously very serious. The ill mother, whatever her courage and devotion, cannot provide for her children all that constant watchfulness and unceasing solicitude which tax to its utmost the resourcefulness of the mother whose health is unimpaired.

Mental Disturbance

One type of illness—mental disturbance—is so great a factor in child dependency and neglect as to require special consideration. On the latest date available, there were in hospitals for the insane in the United States, 338,251 persons. Almost all of these were adults. The actual age distribution is not available, but tremendous numbers of them are of the age periods at which the men would normally be supporting families and the women caring for households. The period between the first appearance of mental disturbance in a family, and the stage at which commitment to a hospital can no longer be avoided, often involves a most unusual demand upon the family's resources, and is particularly disruptive of the harmonious setting of the family which contributes powerfully to the normal development of children.

If the mother be sent to a hospital for mental patients, some make-shift must be resorted to. In many cases, the home is broken up temporarily or permanently. Sometimes the children are separated and placed among various relatives. Uncertainty as to the possible return of the mother clouds the future and makes satisfactory planning impossible. If the father is the victim of mental disturbance, the income of the family is abruptly cut off. In many instances the children are sent to the care of others, and long range planning is impossible. If one could look into the family groups from which this army of more than 300,000 mental patients came, an amazing volume of child dependency and neglect would inevitably be disclosed.

Accidents

The number of persons injured or killed in accidents in this country each year exceeds the total casualties sustained by the American forces during the whole period of the World War. Although the exact number of those injured or killed at work is not known, estimates, based on available data, place the number at over 2,000,000 each year.

In spite of a declining accident rate in certain industries, there has been in industry as a whole an increase both in the number and severity of accidents, and there has been a tremendous increase in automobile accidents. The present method of dealing with accidents cannot, therefore, be considered satisfactory.

No definite information is available as to the total number of

dependents in accident cases. The American accident table shows that for every 100,000 industrial accidents, 762 are fatal, and of those who die, 279 leave 709 dependent children. Consequently, there are over 14,000 children who are orphaned annually by fathers dying from accidents met while engaged in earning a livelihood for their families. Although these totals are estimates and not exact, more complete statistics are available for certain States. For instance, in Pennsylvania, reports of the State Industrial Commission show that since the workmen's compensation act became effective in 1916, there have been 38,043 children under 16 years of age left dependent through compensable fatal accidents.

The most recent annual reports of the industrial commissions of 4 States—Massachusetts, New York, Pennsylvania, and Wisconsin show a total of 4,433 child dependents in fatal cases during one year.

At present, all but 4 States have some type of workmen's compensation legislation and approximately $150,000,000 is expended annually in awards and medical benefits. However, many thousands of employees are not protected as these laws do not cover certain occupations. Railway workers engaged in interstate commerce are a notable example. In this occupation there were almost 1,700 deaths from accidents in 1927. Most of the laws exempt agricultural, domestic and casual employment; 12 States exclude non-hazardous employments; and 23 States exempt employers of less than a stipulated number of employees. Occupational diseases are compensable in only a few states.

The Burden of Accidents on Workers

The many restrictions and qualifications in the compensation laws have resulted in the injured workers bearing about 50 per cent of the burden of accidents in States having the most favorable legislation, while in the other States their share is from 65 to 80 per cent.

In New York, which is one of the States having the highest benefits, the injured workman still bears so much of the cost of the injury that he frequently loses his economic foothold. Compensation benefits must in many cases be supplemented by public or private relief.

According to the latest reports of 4 state industrial commis-

sions, over one-half the injured workers earned $30 a week or less. It is apparent that any interruption or reduction of income will work hardship on their dependents.

Although repairs to machinery is considered a legitimate item in the cost of production, the cost of damage to human mechanism is being thrown largely upon the injured worker, his dependents, and the community.

Premature Death

The first child-caring agency in the United States was established for children made orphans in an Indian massacre in 1729. Most of the earlier institutions for dependent children were termed orphanages, and were established for the special purpose of receiving children who had lost one or both parents. Conditions have changed greatly in this respect in a period of 200 years, but premature death of parents still remains an outstanding factor in the background of child dependency. "Widows' pensions" was a most effective phrase in securing legislation. No correspondingly simple solution has been devised for the assistance of children of widowers.

The deaths that disrupt families and create dependency are primarily those between the ages of 20 and 50. On the last date for which figures are now available, the 3 largest causes of deaths among women in the entire registration area of the United States between the ages of 15 and 45, were the following:

Tuberculosis	122 per 100,000
Childbirth	70 " "
Heart disease, organic	35 " "

Notwithstanding the extraordinary progress which has occurred in the prevention of tuberculosis, it still remains the largest cause of death at this age period, and consequently the largest cause of child dependency due to orphanage. The 90,000 deaths from tuberculosis recorded in 1928 present a continuing challenge to public health and social welfare programs. Probably few persons would think of childbirth as the second greatest cause of death among women between 15 and 45 years, but such it is. Puerperal septicemia causes two-fifths of all maternal deaths, being the important single cause—yet almost all of it is preventable, for the conditions causing it are clearly understood. Measures to improve the training of physicians and midwives in obstetrics and promote the availability of adequate nursing and medical maternity service for all classes of the population will effectively reduce death among moth-

ers at the time of their greatest usefulness. Organic heart disease, the third largest cause of death among women of this age group, accounts for only one-half as many deaths as childbirth, and for less than one-third as many as tuberculosis. These three diseases then are the greatest factors in leaving children motherless.

Among men from 20 to 55 years of age, the 4 leading causes of death in the United States registration area in 1926 were in the following order:

1. Death by violence (excluding suicide)
2. Tuberculosis
3. Pneumonia
4. Heart disease.

These 4 causes accounted for considerably more than half the total number of deaths of males of these ages and are therefore the outstanding factors which send widows, and an average total of some 220,000 children to be cared for, to the offices of the mothers' aid officials, and to many other family and child-caring agencies of the country. A study by this committee revealed that in 9,471 families receiving mothers' aid in 1930, over 71 per cent of the fathers died before reaching the age of 45 years.

Irregular Employment and Unemployment

Seasonal activities, a failure to adjust supply to changing demands, and an excessive number of workers accustomed to a particular occupation, deprive many thousands of families, most of them in the lower wage groups, where at best the regular wage barely suffices to meet the current needs, of that regular income which is essential to the maintenance of a normal standard of living. In addition, the displacement of labor by the invention of new machinery or the improvement of technical processes produces at all times a substantial amount of unemployment of persons, who, at best, can only gradually find places in other occupations.

In addition to this, business cycles and obscure factors of a social, economic, and political character, create business depressions which cause huge volumes of unemployment for shorter or longer periods.

These various types of irregular employment and indefinite unemployment are a major factor in privation and want among children.

Family Income as it Affects the Child's Security

A general recognition of the tremendous part played by economic factors, and particularly by insufficient income even regularly received, in the generation of dependency and neglect is of recent origin. We have now reached the point where those interested in child welfare must advance on a broad program designed to safeguard children through the medium of greater economic protection for their parents, or commit themselves irrevocably to the prospect of receiving endless thousands of children into foster care in the years to come. Conscious social effort must strive to regulate those social, economic and governmental factors, with which unaided parents are unable to cope.

Economic security or continuous ability to provide adequate food, clothing, housing, leisure for recreation, medical care, and some surplus for temporary incapacity to earn, and for the waning productivity of old age, is a fundamental requisite to wholesome family life. The normal and socially desirable situation is one in which the infant is born into a family in which a mother is continuously present during his period of helplessness to attend to his needs, and where a father is at work and earns enough to provide the necessities of life. Whether a father works, where he works, and what he earns, are factors of the first importance to all who are dependent on him.

Income sufficient to permit of saving is one of the factors in keeping children with their own kin when illness or death or other causes remove one or both parents. Child-caring agencies and institutions are generally not asked to accept into care children of families which for any considerable time have had an appreciable surplus above their necessary living expenses. The first test of adequate income is the pay envelope measured against the cost of living. Experts, as a result of extensive research, are in general agreement that in cities, at this time, an ordinary family cannot maintain a reasonable standard of family life for less than from $1,600 to $1,800 per annum. Douglass says, "It requires some $1,600 to $1,800 for a family of five to live at a minimum of health and decency in our American cities." Ogburn's "Comfort Budget" of 1918 for New York called for an income of $1,760. The index of the cost of living for New York was practically the same in 1929 as in 1918, and the 1918 figure may be taken without change in 1930. Houghteling's study of the standard of living for

unskilled laborers in Chicago in 1925 arrived at a budget, not including rent, of $1,548.88. Correcting this for 1929 and adding $300 for rent, gives a minimum standard of $1,740. Often there is income from the labor of other members of the family in the home, the wife, the older children or relatives. Sometimes this is a justified income; often it means an incomplete performance by the mother of her duties as a home maker, or an unfortunate sacrifice by the older children of educational opportunities which would increase their future earning capacity. These estimates are for urban and industrial areas. In small cities, villages, and rural communities where rentals are lower and home ownership and the cultivation of a garden are possible, economic resources are not measured wholly in terms of wages. Standards and values in the cost of living also vary greatly as between urban and rural areas.

In a comparison of the wage figures for the industry employing the largest number of workers in each of 12 groups covered by the United States Bureau of Labor Statistics for 1929, one finds only 3 industries reaching or exceeding a minimum wage level of $1,700 a year. Two industries fall short of the minimum standard by over $800. These computations disregard possible periods of unemployment which are likely to occur to further reduce the annual income.

Studies of the distribution of income in the United States show that the majority of families in this country are living close to the margin of economic want. The experience of social agencies shows that there is always a group living below this margin. This condition of insecurity creates a state of constant deprivation. The National Bureau of Economic Research finds that 98 per cent of the population receive incomes smaller than $5,000, and of this great group many receive less than $2,000. These figures, which are presented only as illustrative material, throw considerable doubt upon the ability of large numbers of male wage earners to earn enough to support a family at current wages even if steadily employed.

There is no certainty then that many wage earners will earn enough to support a normal family even when steadily employed. When the hazards of unemployment, illness and accident are taken into account, in many cases all hope of his doing so vanishes.

But if this be true about earnings for current needs, saving for old age, in the case of the average wage earner, becomes an impossibility. Careful investigation in limited areas indicates that in

the United States as a whole there may be over 1,600,000 aged dependents. This is about one-fourth of the total population 65 years or over. Sometimes aged dependents are able to make real contributions to the family needs, especially outside the large cities, by aiding in the care of children and other household duties, by producing part of the food supply, or by occasional earnings. On the other hand, in the larger cities especially, the care of aged dependents is a burden for many young married people and can only be carried by a sacrifice of expenditures essential to the proper growth, development, and education of their children.

Persons of low income make up practically the entire group coming to social agencies, and consequently, since most of our organized social effort is carried on in cities, such agencies are intimately concerned in the problems of the lower ranges of the wage-earning class. Their problems are of paramount importance since neither the individual, nor his family, can control the purely economic features of his environment.

PROMISING OPPORTUNITIES FOR THE PREVENTION OF CHILD DEPENDENCY AND NEGLECT

A review of the social history of many States and countries suggests that as they become conscious of serious social needs, their social policy expresses itself over a term of years, as a rule in four stages, in this order: (1) Neglect; (2) relief; (3) insurance; and (4) prevention.

Of these, the only defensible ultimate policy is that of prevention, insofar as prevention is practicable.

It is evident that child dependency is not an isolated social factor, but that it is bound up with, and is the product of the personal shortcomings, deficiencies, and misfortunes of individuals, and is also a by-product of the entire state of social, economic, and political relationships between individuals which have slowly developed through long periods of time. The questions, therefore, as to whether, and to what extent, and in what ways, child dependency may be prevented, involve the entire subject of the amelioration of the conditions of human life.

A glance at the major causes and factors of child dependency, enumerated in the preceding chapter indicates that they are by no means static; that most of them pass from one phase or stage to another; that consciously to modify any one of them requires care-

ful planning, ample resources, and great wisdom; and that they differ in the extent to which present knowledge promises early favorable results from efforts to control them.

In the prevention of sickness, there are indeed many promising opportunities. The public health movement is of recent origin and obviously is in its early stages. Science frequently adds new and brilliant possibilities. Each step in the development of public health is a step in the prevention of child dependency.

Mental disturbance holds out less possibilities of early and effective diminution of its volume. The origins of its most frequent types are obscure, and present knowledge of them is incomplete for comprehensive programs either of cure or of prevention.

Accidents offer large possibilities of prevention. The prevention of accidents of all kinds is, however, a huge and complicated task, whose nature and program is little understood, and which the country is little prepared to undertake effectively at once. In the field of industrial accidents, reliable estimates indicate that from 75 to 98 per cent of accidents could be prevented if known methods of prevention were fully availed of. At present, children, deprived of fathers and of the security of a normal home, are bearing a large part of this preventable burden. The further shifting of the cost to industry, and through it to the community, would result not only in the prevention of child dependency, but since industry would recognize the value to it of safety measures also would tend to bring about a pronounced reduction in accidents.

Premature deaths among women between the ages of 15 and 45 are due, in a majority of cases, to tuberculosis, childbirth, and heart disease. The preventability of tuberculosis is the great outstanding fact in the field of public health. Its volume has already been reduced by one-half. There is no reason to doubt that rapid and extended progress may be made in the early future. That the present mortality in connection with childbirth in this country can be tremendously reduced can not be doubted, since the corresponding rate in most civilized countries has long been much below that of the United States. Even deaths from heart disease, at this period of life, are undoubtedly subject to some degree of control. Two of these three great causes of deaths of mothers offer brilliant possibilities for the diminution of child dependency from orphanage.

Of the four leading causes of death of men between 20 and 50

years of age, one, tuberculosis, should be very greatly diminished in the future; another, accidents, should yield to some degree of control. For the other two, pneumonia and heart disease, with our present knowledge, relatively little progress may be expected in the near future.

That the cost of sickness, and of premature deaths, which are not preventable or are not actually prevented, and which fall unexpectedly with crushing weight upon individuals and families, should be distributed over larger numbers and over longer periods, by some application of the insurance principle, is not open to doubt.

The prevention of irregular employment and of unemployment is a problem of statesmanship of the highest order in the fields of industry and government. The hope that large results may be achieved in this direction will not be given up. Meantime, it is certainly within the range of social statesmanship to distribute, over much larger numbers and over longer periods of time by some application of the insurance principle, the present losses in family income due to these causes which fall with devastating effect on individuals and families. The volume of child dependency should be tremendously reduced thereby.

CONCLUSIONS AND RECOMMENDATIONS

Some of the major conclusions of the Committee on Dependency and Neglect, though stated more fully and with many supplementary suggestions in the text of this report, may be summarized as follows:

1. The recommendations of the White House Conferences on Dependent Children of 1909 and 1919 are accepted and reaffirmed in all essentials, by this Committee. Insofar as they have not yet been realized in practice, they should be kept steadily in mind in the future development of care for dependent children.
2. The accepted principle that children should not be removed from their homes for reasons of poverty alone should be carried into actual effect. Legislation establishing systems of home relief and of child care, should be revised so as to accord with this principle, and should be administered so as to achieve this objective. Mother's aid should be everywhere available in fact as well as in theory, and should be extended to include all mothers suited to rear their children and unable so to do without public aid. The programs of voluntary home relief and child welfare agencies should

also be in harmony with this principle. Public authorities and private relief agencies should not separate needy children from their families simply because some agency is able and ready to offer free care for the child apart from its home.

3. The needs of children, born out of wedlock, for good care and education are the same as those of other children. These needs should be provided for so far as practical by their parents with the aid of voluntary or public charity when necessary. Sympathetic persons of wide experience in this special phase of social work, must determine the actual application of these considerations in each case of need.
4. Serious thought and special effort are necessary to adapt child welfare methods and agencies to the unusual needs of Negro, Mexican, Porto Rican, and Indian children and other children where there are special problems of race, nationality, or mass migration. The general principles of child care are the same; the practical application involves complicating and difficult adjustments, requiring serious study and consideration.
5. In every State there should be adequate legislation for the protection of children from abuse and neglect. In each community there should be available the services of an agency or authority with special training and experience in the enforcement of these laws, and in the study of the causes of neglect of children and in its prevention.
6. The separation of a child from his own family and his care in a foster family or institution is a most serious matter, and should only be undertaken by persons qualified by special training, experience and skill.
7. Endowments, gifts, and foundations for child care should be in general and flexible terms, leaving precise methods of care and choice of types of beneficiaries to the discretion of future trustees. Child-caring agencies should express their corporate purposes in general, inclusive, and flexible terms. Corporations with terms so expressed should be selected for large gifts or bequests. All practicable measures should be taken to bring these facts before potential donors of large sums by gift or bequest. Trustees of funds with narrowly prescribed and outworn purposes should seek court approval of a liberalization of such purposes.
8. The Federal Children's Bureau has been a most effective agency since its establishment in 1912 in the collection of information as to all aspects of child dependency and in the promotion of better methods of caring for dependent children. It should be enabled to collect more complete information currently in regard to dependent children, the methods of their care, and the results of such care.
9. Serious hazards to adequate child care arise from unfore-

seeable factors such as sickness, accident, premature death and unemployment. Insofar as these misfortunes are not preventable, or are not actually prevented, they should be distributed over larger numbers and over longer periods of time by some adequate and carefully devised application of the insurance principle.

10. The causes operating to produce child dependency should receive serious and continuous study with a view to their restriction or control. The avoidance of loss is far better than its subsequent distribution. Sickness, accidents, premature death, unemployment, and an inadequate wage income offer varying degrees of opportunity for effective prevention. None of them can be said to be readily preventable. Some offer much greater preventive opportunities than others; but no one can be said to be hopeless.

C 2. DELINQUENCY

THE problem of juvenile delinquency in this country is of immense importance because of its size, because of its implication that here lie the earlier manifestations of all our problems of crime, and because—as we more and more recognize—its study inevitably leads us into the midst of all those human joys and sorrows, strivings and thwartings, dreams and disillusionments, which are caught up in the total matter that we call adjustment to life.

THE PROBLEM

On the basis of the best available statistics it is fair to say that in 1928 about 200,000 different delinquent children were dealt with by the courts. In the area for which statistics are available almost one per cent of the children of juvenile court age came before the courts as delinquents in that year. This figure takes no cognizance of an undoubtedly much larger group dealt with by the police without recourse to the court. These children who come to the attention of courts and police are the actually apprehended delinquents—those who have found it beyond their ability to meet even those more elemental demands that have their origin in our living together as a group.

Beyond the unmeasured sorrow that all this means we might not be unduly disturbed were there not ample testimony on every hand that adult crime has here its earlier manifestations. Outstanding among the challenges of this last generation has been the repeated testimony of judge, student, social engineer, and of offender that practically all of our problem of social maladjustment was long ago forewarned in the earlier influences and childhood reactions of this drifting and threatening mass of human misfits. Much of our present mode of handling these problems is but the endless, monotonous task of sweeping up the debris of life.

Yet we are arrested by the problem today, not solely because in sheer size it threatens our smug door-steps, nor only because, freed

from our myopia, we see now the implications of these delinquency phenomena in terms of future devastating waves of human maladjustment. Particularly over the last twenty years we have come, through more knowledge of the individual delinquent, to realize that in the study of his problems we have the study of life, that in charting the stresses of his failure we map the course of all. Perhaps nothing is more real in our latter steps than the growing recognition of the fact that "The Problem Child" has now become "The Problems of the Child."

PAST ATTEMPTS TO SOLVE

Society has struggled long with this problem. Whatever may be said of a new generation with new difficulties the fact remains that our forefathers felt the imminence of this problem that is ours and planned to meet it with measures of real definition and force. Regardless, now, of what other factors of over-weening discipline there may have been, their project stands today what it was—a sincere and vibrant program for controlling delinquency. There were three aspects of the program in which our ancestors stressed their duty to their children:

First: The rigid inculcation in the child in earliest years of habits of regularity, honesty, sincerity, and courage—as the essentials of living harmoniously with others, of giving consideration to their rights.

Second: A feeling that it was incumbent upon parents, guardians, and their vicars to provide an adequate amount of wholesome mental pabulum for the child. Here was an obligation on the part of all adults in the child's total environment to surround him with positive, wholesome interests so that his ideation, his mental life, could have these as its "raw material."

Third: A sober realization on the part of the community's adult membership that it could ask of its children nothing beyond what challenging vision it gave through its own habits of regularity, honesty, sincerity, and courage; beyond what example it set in its own life of the acceptance of the responsibilities and privileges of living with others.

Bound intimately in this program was the certain expectancy that from it would flower in the child a respect for the traditional, an acceptance of the integrity of the existing social framework, and a recognition of the rights and privileges of others.

In comparison with modern results was this program of avail?

This cannot be answered. Of the real extent of human sorrow and inability to live in happiness with the group we do not know. Nor do we know what it would have meant in this earlier period to have had all of the complicating "mechanical" problems—problems of speed, problems of the multiplying through machinery of man's potentiality without material biological change, of the automatization and regimentation of all those "vigors" of life which seem so bitterly to resent just this. Affirming our confidence in these "older" methods we yet must admit that new conditions have developed, that the guardians of children have not adequately met their obligations, and that an added approach to the problem has become necessary.

RECENT ATTEMPTS TO SOLVE

The great humanitarian movement of the last century established "juvenile asylums" and "houses of refuge" for children who otherwise would have been committed to jails and prisons, or for those who were homeless or neglected. Somewhat later the idea of farm and shop training for delinquent children developed. Court procedure was for the most part unmodified until the juvenile court movement of the past 30 years developed the aim of safeguarding instead of punishing the child, of providing him with the care and training which a wise parent ought to give. This objective led inevitably to a realization of the need for determining what sort of a child got into trouble and why. Twenty years ago there developed an effort to find out what sort of a youngster the delinquent was.

Thus the child became the object of carefully weighed study —no longer merely the recipient of a sort of consecrated set of duties or of a sympathetic humanitarianism. We saw, under the guidance of a pioneer psychiatrist, that delinquent acts are but symptoms of deeper stresses and difficulties, and that it is as futile to make these acts the center of our interest as it would be to treat primarily what is merely the symptom in any physical disorder. In a maze of conflicting theory there yet remains the fact of the psychiatrist's real contribution to the problem, namely, the conception of the act itself as but the natural and expected sequel of some deeper trouble. We cannot understand the deeper trouble and arrive at a sound method of dealing with it unless we understand the child himself. We must know why the delinquency happened.

PRESENT-DAY TREATMENT

The aims of the last generation have profoundly influenced the treatment of juvenile delinquency, and the present-day emphasis on scientific study of the child as a basis for understanding and dealing with his problems has received widespread theoretical acceptance. Nevertheless the treatment of the delinquent child still frequently violates the principles of humanitarianism and is much characterized by the "common sense" or "trial and error" policy, rather than by scientific consideration of the causes of his failure to conform to the requirements of society. There are still widespread, inadequate school procedures for dealing with truancy and behavior problems; unnecessary arrests; detention in police stations and jails; juvenile courts, presided over by poorly paid judges not especially prepared or selected for children's work and without the services of an adequate number of qualified probation officers; absence of psychiatric services; inadequate facilities for foster home or institutional care; absence of an effective parole system; and, more important than all, lack of a well-rounded and coordinated community program for the development of constructive, wholesome interests and the early study and guidance of children presenting problems of behavior and personality. There is ample evidence that the knowledge we now have is actually applied in only a few communities and even there with reference to comparatively small numbers of children. Moreover, even under the most favorable conditions, we need far more understanding than we now possess of the causes of delinquency and the conditions under which it may be ameliorated. In view of the consecrated effort that has been brought to bear upon the problem over the last generation, there is no such assuaging of our problems as we might well have hoped for.

It was with this background that the committee on delinquency began its work last year.

Purpose of the Delinquency Committee

Certain handicaps and difficulties made themselves apparent at the start. These seemed chiefly to be: (1) That there exists no accurate statement as to the amount of delinquency in this country, nor whether it is increasing or decreasing; (2) that there is no accurate conception as to what actually constitutes delinquency.

(The committee felt that in general "delinquency" has meant merely "apprehended delinquency." The definition adopted throughout the rest of this report is that "delinquency is any such juvenile misconduct as might be dealt with under the law." The committee felt that this broader definition would much increase the number of "delinquents," carry its considerations out to the limits of a fair share of all juvenile life, and determine a point of view and emphasis for the entire report); and (3) that the approach has been so individual to different communities and to different leaders that there exists no general philosophy, no unified working hypothesis concerning the problem.

The first task was, if possible, to crystallize out of experience a certain mode of approach, a general philosophy on which our attack for the near future might be based.

BASIC PRINCIPLES

Any program for dealing with delinquency must first establish the facts as to why persons are delinquent. The committee has accepted as basic two principles that seem axiomatic but are far from universally accepted in practice. These are: (1) Reaffirmation of the notion that delinquency is a symptom, in the sense that it is the rather naturally expected expression of some earlier, deeper or more pervasive maladjustment; (2) recognition that the matter that requires and merits study is the delinquent rather than the delinquencies. Our law has so busied itself with property that people have had short shrift.

It is then, as stated above, the child himself to whom we must direct our study. He has earlier seemed a sort of isolated specimen, looked at (somewhat affected it is true) by his environment —but regarded essentially as a separately functioning biological organism. We still see the child himself as the key to our approach, but we recognize that he is chiefly the product or expression of the action and reaction between himself and the total milieu which is about him. This newer aspect of our approach is not so much what one might term sociological as it is the realization that the individual is himself in a large degree the end-result of his social contacts. To say that the child is a growing organism with certain inherent needs, prerogatives, and hungers which clash with the equally justified needs of society as expressed largely in the various social institutions, is not only to oversimplify the problem but to

set up a dualism that is artificial. What one actually deals with is a wider conception of what constitutes the child himself—a realization that amongst all his other characters is that of attaining some solution of the inevitable clash between those hungers and drives that are essentially individual and those that are a part of his success as a socialized being in the midst of the hungers and drives of others.

Thus, for the purpose of clarifying, the committee outlines what we consider to be the basic personal needs of the child, and then shows how these needs clash in a perfectly natural way with one or another of the group needs. It is submitted that delinquency is one of the many natural products of this clash. Wherever there is growth there are factors both radical and conservative, wherever there is change there are the strivings of the old against the new, the stresses of the future upon the past. In our daily lives this struggle goes on. From it emerges the sense of victory, or of defeat that makes us of little avail to ourselves or to the progress of the race. The child is a new individual, but as he enters the ever-widening social milieu to which he must conform his own needs and life, he may accept the mold that is about him, and thus become one more of that great group who are like all others, the "model child." Such persons have been termed "incomplete personalities" for they have only force which must be directed continuously by the authority of numbers or the example of others, rather than by the authority of their own individual personalities. Or the child may fail to adjust himself to the prerogatives and needs of the group, and become an individualist, a neurotic, or a delinquent. On occasion the individualist's eccentricity has in it such fire of power and interest that we acclaim him the leader, and we unquestioningly follow. At all events he is lonely, unusual, and we little understand him. A third outcome, much more rare, is that of him who, in all this strife, acquires some such dynamic commingling of the power of numbers with the leadership of individuality as to carry on the progress of the race.

The Fundamental Needs of the Child

It is recognized that children have needs. These, it would seem, would vary in number and intensity in each individual. It is, however, possible to enumerate 2 such needs that would be common to all children and so fundamental that they could be

stated as basic. In catalog fashion they are: (a) the need for security and (b) the need for development.

As a foundation for a satisfying life, every child needs to be wanted, loved, and understood. He needs to feel that he is accepted and belongs because of his own individual place and values in relation to the rest of the group. As he grows and develops he will have an ever-widening sphere of affection which starts with the mother, the father, and other members of the family, and later extends to those outside the family group. To the individual child, this is security.

Along with the satisfaction of these security needs there is also the need to grow, a desire for the satisfaction of new experiences. Curiosity and imagination require some sort of self-expression, achievement, attainment of a rôle that seems in some way consonant with the total drama which is about the child. This involves a reaching out for a desirable part in the total milieu. Fulfillment of this need requires: (a) acceptance of one's self, and (b) expression which is in some sort of relationship to the child's environment. This is, to the individual child, development—a sort of blossoming process whose steps are in some degree of orderly and progressive sequence.

Security and development as used here are terms as applicable to adults and to many social institutions as they are to the child. To make some differentiation between these various elements is advisable through a listing of some ways in which they are attainable for the child.

Security is attained, for example, through affection, in the sense that from the beginning every child needs to feel wanted, needs to find himself loved, and needs to satisfy normal desires for sympathy and understanding. There must be too, a widening sphere of affection, for while satisfaction of the earliest affectional need is dependent on his family, the child must later find this need answered in friends beyond the family circle, and thus develop through various phases until normal interest in the opposite sex is reached by the end of the adolescent period.

The child then develops, growing, for example, through his being recognized as a unit or separate individual from the very beginning of life. Later such recognition includes considering all those conditions that give him a satisfying status as an individual. Development is attained also through self-confidence with reference to all that is needed in growing toward a well integrated person-

ality, this self-confidence being based on the child's feeling, from very early life, security in the stability of the family, and in due time, his feeling security in the larger social sphere which he enters. Another factor in development is a feeling of adequacy, that is, he shall grow up with the minimum consciousness of inferiority, or with adequate compensations for irremediable conditions that cause feelings of inferiority. There must be adequate opportunities for mental experiences and stimulation. These include toys, books, play, conversation, an ever-widening sphere of activity in keeping with what is normal for the child's age and including education suited to his individual capacity. There must also be opportunities for growth and emancipation into independence. In order to develop normally, the child needs development of his own powers with increasing emphasis on self-direction, training for wise choices, and gradual release from too great family control. In order to satisfy the needs that have been described, the child must have avenues to obtain the satisfaction of self-expression, experimentation and achievement, which are not merely passive but include some active participation in experiences.

With this summation of these basic needs, prerogatives and hungers of the child it is proper to consider the various contacts and conflicts which are his throughout early life by presenting first, what is termed, "the delinquent himself," but perhaps better stated is, "the delinquent's relation to himself."

The Delinquent in Relation to Himself

Although, in seeking to know and to eradicate the causes of delinquency, it is necessary to study all those elements of his physical and social environment that may have been provocative of delinquency, the central problem in any case is inevitably the delinquent himself. Nearly all children have been in contact with such influences towards producing good conduct as may serve to immunize them against possible stimuli to bad conduct. Moreover, without doubt, many living under apparently the same deleterious environmental stresses that play upon the delinquent have not responded with delinquent behavior.

It is these considerations that demand imperatively our study of the physical and mental picture of the individual delinquent, and of the result of experiences that create mental attitudes, ideas, or conflicts leading to the delinquent response. Then, too, we must

seek the delinquent's assets and promise as thoroughly as we explore his liabilities and defects.

PHYSICAL AND MENTAL CONDITION

The earlier idea that delinquency and crime result from inborn general physical constitution has been entirely discounted by scientific research. Nor is the notion of any direct inheritance of delinquent or criminal tendencies accepted today. There is ample proof, however, that the existence of certain physical defects, diseases, and peculiarities has an important bearing upon the incidence of misconduct. These may act in one or both of two rather distinct ways. The peculiarity may primarily incite a delinquent career through having eroded those strengths which are essential in meeting the stress and strife of normal living—as in those conditions which destroy or fatigue the powers of inhibition, of self-control. Or the peculiarity may act secondarily in the sense that it serves for the child to set him apart, to make him different from others —as in deformities which impel the child to abnormal conduct as a means of fulfilling those natural ambitions that he feels to be thwarted by his physical defect.

Outstanding in the first group are constitutional physical inferiority, as evidenced by poor development of musculature, skeletal deformities, abnormal body chemistry or defective or unbalanced glandular secretion, injuries that cause damage to brain cells; also epilepsy, epidemic encephalitis, chorea, and all that great group of toxic conditions that come from foci of infection. In the second group one naturally thinks of matters of unusual stature, physical peculiarities that may seem trivial to everyone but the child himself, poor vision, and similar difficulties that make school and other success beyond easy attainment.

Important as are these possible physical factors there is danger in over-emphasis. Not only are very many delinquents found to be in thoroughly good physical condition, but, again, we are aware of an extensive amount of physical difficulty in that portion of the population that is not delinquent. Deeper, more ominous and more of promise than this, is the child's attitude about the physical disability. No one dare approach this problem who cannot with real lightness of touch aid the handicapped child to weave out of these broken threads, patterns of challenging strength of character. Nowhere in the field of delinquency is a finer art required

than in this matter of aiding the child to meet disability without bitterness, handicap without defeat. In short, it is the use by the child of his setbacks as aids to meeting squarely himself and his problems.

The part that intellectual handicap plays in delinquency is certainly not of the importance earlier attributed to it. The greater proportion of delinquents are of normal mental capacity. In fact some of our most serious delinquents are of distinctly superior ability. Mental disease plays a very small rôle, but recognition of such cases is exceedingly important for diagnosis and treatment. Abnormal personality is a more usual finding, children of this type showing a predominant and stubborn tendency to develop delinquent careers through inability to conform or to find other satisfactions.

EMOTIONAL LIFE

We turn from these more constitutional conditions to the flowing, changing aspects of the child's emotional and ideational life. While this is dependent upon and is much the result of his social contacts, yet in the commission of the actual delinquency it is inevitably the delinquent himself and his own mental patterns that are of predominant importance. The keenest and most sympathetic study should be made of those mental factors leading to the particular difficulty under consideration. Precisely because the actual delinquency seemed to the child at the time, to be a natural and logical act, one can understand the genesis of the difficulty only through an abbreviated and friendly re-living of the child's life with him—in general, following the original time sequence. From whatever source obtained, the delinquent's specific thoughts as to the delinquency are the direct precursors of his anti-social behavior. Inextricably commingled with these may be those unsatisfied desires, feelings of frustration (such as not being wanted or trusted), a sense of not belonging, or feelings of inferiority and inadequacy, the origin of which is discussed elsewhere in this report.

HOW TO APPROACH THE DELINQUENT

In this briefest of resumes there are two implications of outstanding importance: (1) For every delinquent, it is essential to call upon the widest range of expert help in ascertaining the weak-

nesses and strengths of the child's constitution, structure, make-up. For both diagnosis and treatment is this assay of the quality of the delinquent imperative. (2) It is ever essential that the person in whose charge he is, discuss with the child in the most understanding and friendly way possible the life of the child previous to the delinquency in order that he may approach the delinquency in the same natural way as did the child, may most easily, logically and surely understand and aid the child.

Accusation is paralyzing. Delinquency is part of a continuous, flowing life, and it is artificial, bungling, unreal, to consider it as other than an integral part of that life. Until—in all friendship—that life is re-lived, the delinquency cannot be understood; until the delinquency is understood, it cannot be cured.

The Child in His Family

Most studies of the relationship of the family to apprehended delinquency have dealt with the more objective aspects of home life. The so-called "broken home" appears in something like one-third of all of the delinquency cases which come before the juvenile court. Poverty and economic stress are of the gravest importance in apprehended delinquency. Beyond depriving the child of essential physical necessities there is the deeper, more lasting and more important hardening effect of constant financial stress and strain. Criminal and delinquent behavior runs through the immediate families of high percentages of delinquents. Without in any sense minimizing the child's right to an intact and sincere parenthood, we emphasize that there is large chance that instead of causing the delinquency, these misfortunes themselves are often but other symptoms of those deeper interplays of human tragedy that are expressed in the delinquency. Yet we cannot ignore these statistics. Family unity and integrity are necessary. The presence and mode of living of both parents are to the child the keenest and most certain symbols of these essentials. Certainly any program that is to ameliorate the problem of delinquency must take cognizance of those forces that lead to the separation of parents or to demoralization in their living. "Behavior is caught, not taught."

FAMILY TRADITION

However, we cannot escape a more fundamental source of conflict between the child and the family. The family has a definite

integrity. Here it is expected that the child shall first learn to live with others; that he shall have his early lessons in the rights and power of the group. Families have traditions and seek to preserve them, not as satisfying adult appetites, but due to an abiding faith that somehow here lies the real continuity of the human heritage. The world is not this day new: with all our recent changes, the more basic and pervasive human problems are age-old. Their solutions and failures of solution cover the pages of the past. It is the guidance and inspiration of all this consecrated effort which the family, the church and the school are expected to give to the child. Essentially conservative (for it sums the past), the family conflicts with the child who must be radical —for he builds for the future.

FAMILY NEEDS

Families are idiomatic, perhaps even more so than persons. Certain needs, however, are common to all. They are common in the sense that any group so constituted, with a husband and wife, and from none to many children, must express itself in certain ways if it is to preserve its generally accepted structure and function.

The family group has a fundamental need for security, for stability within its own relationships. This security may be attained by: (a) A sense of mutual belonging among its members and of an accepted place in the community; (b) a feeling of harmony among the individual members, a unity or esprit de corps, due to the presence of common or mutual ties; (c) economic stability—that more physical need including enough of the essentials of food, shelter, clothing, and protection to allow the individual members of the family to feel that what they possess compares favorably with the possessions of other families in the social milieu which they consider to be their own. Many times the family little considers those amongst whom it lives now for its measure of comparison, but prefers ancestral standards of its own or those of groups among whom it earlier lived or expects later to live. It is further important to note that the family has a relatively extended vista and thus often looks complacently upon ultimate comparison with its own milieu. That is, the family considers such elements as savings and investments in education as furnishing the means for later comparison that may be a real source of satisfaction.

The family, like the individual, has need for growth. But growth for the family demands the development and weaning of new individuals. By this process the group is augmented through the addition and growth of new units that are both like and unlike the original. That is, in practically all families the child arrives in a group that has more or less intense urges to express through the child—urges that have been determined by the earlier experiences of the parents. There is thus a very strong desire within the family that the progress of the child be the expression of parental dreams, ambitions or thwartings.

In a family where the interplay of relationship is based on a healthy acceptance of one another and on an integrated, harmonious esprit de corps, any apparent conflict between the urges of the individual and the needs of the group may never become so crystallized that any individual feels that he is undergoing hardship. Often, however, in less satisfying family life this conflict of needs expresses itself in personality traits or in behavior that is socially unacceptable.

The family is so habitually considered as the indispensable nurturer of the child that it is difficult to envisage the conflict which lies within its various activities. The conflict has two sources. First, the family usually gives to the child his first training in meeting and compromising with the needs of others. By its very nature it must represent a source of conflicting interests. Second, the family is composed of adults and children, that is, it is composed of those who have lived and those who are to live certain experiences. As a matter of personal interplay there is then of necessity the setting off of one point of view against the other—the knowledge of the pitfalls as opposed to the courageous interest in finding them, the disappointment of error and omission as opposed to the fresh desire to live one's life as it now points rather than as adult years point.

To know and aid the delinquent one must know thoroughly the facts of his family background—the economic, social and marital status of its members. But even the most complete of actuarial studies is not sufficient—the treatment of delinquency is a venture in happiness not in life insurance. The home may meet beautifully every statistical criterion and yet miserably fail to meet the child's most elemental needs. The child's own family is of the utmost importance to him. The sincerity of the living of the child's own parents is also of the utmost importance to him. Paradoxically

it is precisely the importance of the family to the child that brings into his life the clashing needs, hungers and urges of others, others who are stronger than he. One can know the make-up of the delinquent only if he thoroughly and sympathetically learns the lives (and thus the needs) of the members of the family group, and the interaction between the two.

Those who make up the delinquent's family do not stand apart from him. Their visions and cravings, their satisfactions and thwartings are inextricably a part of his life. To know the delinquent one must know his family, not because it surrounds him, but because the lives of its members germinate, color, and shape his life.

The Child in Relation to the State and Municipality [1]

Legally constituted authority is peculiarly interested in the problem of delinquency. Every delinquent act, no matter what else is involved, contains a threat at the security of the State. A favorite topic for propagandists, the fact yet remains that we do not know today the extent of delinquency in this country, the measure of its seriousness, or, indeed, whether its menace is appreciably increasing or decreasing. This much it seems fair to say: (1) That each year about 200,000 different children are handled as delinquents by our juvenile courts; (2) that this is but a fraction of all apprehended delinquency, much of which is handled by the police; and (3) that apparently there has been no such diminution of the problem as all our efforts at amelioration would seem to have justified.

NEEDS OF THE STATE

The State, as surely as the child, has a basic need for security and development. Security is maintained, for instance, through the preservation of order and public health, the promotion of harmonious and cooperative living, and the conservation and expression of those traditions that have ministered to racial and social progress. The developmental needs exist in the responsibility of each generation to equip the coming generation for more effective living. Legally constituted authority has definitely tended to care

[1] "The report of the sub-committee on the State and Muhicipality will contain detailed statements relating to the organization of police courts and institutions dealing with delinquency and the principles which should govern their administration."

rather more assiduously for the satisfaction of the security than of the developmental needs.

It is perhaps just in this last fact that we have the most acute elements in the present situation. The State symbolizes the solidarity of groups. Yet it is precisely this tendency to consummation of solidarity that emphasizes, that throws into relief, the eccentric, the individual, the delinquent. There are always those who express the centrifugal tendencies. The problem is whether we are to have the vision to see that security in the State has validity only as it is an aid in the vast program involved in our responsibility to the coming generation.

STATE AGENCIES DEALING WITH DELINQUENCY

For dealing with delinquency the State has erected a number of agencies.

The earlier function of the police and other peace officers was to insure primarily the immediate protection of the child and the general public. Upon them the State depended, for the most part, for the determination of the fact of conflict between children and organized society. The courts were primarily tribunals to determine the damage done, the guilt involved, and the proper punitive measures. Institutions served for the detention of those believed to be too dangerous to remain in society, and for the punishment of less serious offenders, especially those unable to pay money penalties.

WEAKNESS OF METHODS EMPLOYED

Unfortunately even today the police for the most part are dealing with children substantially as they deal with adults. They are exemplifying force rather than understanding. The juvenile court, established with the objective of treating the child rather than the offense, is still in most communities greatly influenced by traditional concepts of the criminal law, and is largely an agency of discipline, primarily for the sake of the group, rather than of scientific study and treatment for the sake of the child and the group. The function of the probation officer is frequently regarded as that of gathering facts concerning the delinquent and his family, and of watching over the child to see that he does not again break the law. Our institutions are largely burdened with children who are sent there as a method of punishment or because they cannot be safely adjusted in society. They are released after staying

periods of varying length, during which little attempt is made to help them through treatment based on their fundamental needs, or to assist them through effective parole supervision or otherwise, in their difficult readjustment to community life. A fair proportion of our institutional population is there because the children cannot adjust to society, without regard to whether they can find adjustment through the institution.

TRENDS AND OBJECTIVES

Because the State is beginning to recognize that security attained must lead to developmental needs and their fulfillment, certain changes in these agencies are in progress or are on the horizon.

The police in certain communities have gone some way toward handling children differently from adults. Many courts have gone far in this direction. The best juvenile courts and probation departments are making an effort through expert study, case work, and personal friendship to understand the child, to see why he is in trouble, to rebuild his life in his environment and to make him fit to live as a responsible person in the larger community. Some institutions are becoming real educational ventures, preparing children for normal community life.

But the full satisfaction of the developmental needs of the State lies ahead. As the State realizes more that its duty is toward the health and well being of the coming generation, certain further changes will take place.

The policeman on the beat sees the origin of the corner gang, whether good or bad. He sees those first "feelings-out" on the part of the child of the power of the steadying and regulating force of law and order. Here lies his real field: a task of influencing those early individual and community forces before critical delinquent situations have arisen. It is a positive rather than a restrictive piece of work.

The juvenile court should serve both the security and developmental needs of the group and of the child. To this end it should provide for those children who come before it the most complete study and expert rehabilitation, so far as possible meeting the needs of the child in his many relationships. (Detailed statements relating to juvenile court organization and procedure will be included in a sub-committee report.) For such service it should call to its aid the widest range of expert

help. Juvenile courts fixing blame, cataloging the child's biological equipment, home conditions, schools or community conduct, are not availing themselves of their chancery powers conferred by the State for the benefit of all, unless the treatment they prescribe is determined by the underlying significance of these factors as showing the needs of the child for security and adequate development in his many interrelationships—within what it is possible to give—while at the same time giving due consideration to the correlative basic needs of the family, school and community. Only thus can the courts strengthen social living. This is the reason for granting chancery powers, for providing specially selected judges and probation officers, for establishing clinics, and for making possible thorough, continuing investigations.

The probation officer as the administrator of the court's directions can fulfill these functions only as he is more and more the teacher who is closely tied to the educator and the social engineer in their great task of community education.

The children with whom the court deals should be returned to the more primary educational and treatment agencies at the earliest possible moment. Its function is to wean both the children and the parents for responsible living. The court when called upon is to do this weaning, this educating. It is to do it as quickly as possible, then drop the task. Having at its call the expert help of the community, through its treatment of the problem child, the court may teach the community the problems of the child in the group and their amelioration.

The institution provides a type of environment that is of outstanding value to certain types of children who have always been with us and who always will be. In the future, institutions of this character will be adapted to children who belong there. They will not be used as a place for the reception of children merely because they apparently do not belong in society. They will be linked with a continuing program of service to both the child and the group, through adequately qualified parole officers or other social workers, which will conserve and strengthen him in his social relationships.

The problems of the delinquent are the problems of all children. The knowledge of the pathways of the maladjusted is lifeless if it cannot light the road for the myriad of others not before the court.

These objectives are attainable.

The Child and the School

While the near-identity in age-limits means that practically all delinquents are school children, the school is much more than statistically interested in the problem: (1) There is wide experience that a very high percentage of delinquents are truants—that here first appears the child's overt break with the authority of the group; (2) that beyond this there are the irritations, maladjustments and delinquencies arising from the myriad problems involved in school discipline; and (3) yet deeper lies the problem of what the school means to the child.

Matters of compulsory school attendance, school failure, and the hazards involved in truancy are but the surface phenomena that challenge us to the question why children must go to school and what this experience really means in their lives. This is the method of the diagnostician—and diagnosis without cure is arid. But we have attempted so much cure without diagnosis.

FUNCTION OF THE SCHOOL

The school stands as a representative of society in relation to the child. Since an important part of the process of growing up is to learn how to adjust to society, the school undertakes to furnish appropriate environment in which this adjustment can be learned. If the child were thrown into modern society without elaborate preparation he would find himself seriously unfit to meet the demands it makes upon him. The school constitutes a miniature society in which the child acquires technique for use when he emerges into the world outside.

It is well to stress this positive function of the school at the outset in order that we shall not misinterpret the relation of the child and the school. In preparing the child to adjust himself to society, the school itself presents to the child certain problems in adjustment. In helping the child to meet these problems successfully in a protective environment the school is enabling the child to develop those modes of behavior with which to face the conditions of the outside world.

In thus preparing the child for adjustment to the world at large, the school is in reality performing what may be thought of as two functions. That function which most obviously promotes adjustment consists in setting before the child, or even inculcating

in him, the tradition of the community. In primitive society this tradition may be thought of as embodying a way of life which has gradually grown up through the experience and observation of many generations. With the development of science it acquires a certain degree of objective and demonstrated validity. In any case it represents accumulated wisdom which transcends the experience of the individual and which the school as the representative of society makes available to the child.

This was the function of the school which was uppermost in the minds of previous generations. The school was not much concerned with the problem confronting the child when he was thus brought face to face with the demands of a society which sometimes seemed to him exacting and even unreasonable. The school did little to soften the shock of the impact between the individual and the group. In fact, the teacher sometimes seemed to go out of his way to make the conditions hard, apparently on the theory that if the child could stand school he would be able then to stand anything life would have to offer.

For the most part, however, little thought was given to the nature of the child and to the guidance of his security and developmental needs so that the process of adjustment might take place efficiently and without shock or the waste of nervous energy.

NEW EMPHASIS UPON ADJUSTMENTS

More recently a new emphasis has developed in the school. It is perhaps not too schematic to denote the implications of the following paragraphs as being the school's recognition of its paramount responsibility toward the child's later life—adjustment of each individual child—a developmental rather than a mere security need.

First, there has been growing realization that nothing fails like failure. Although usually no special study of the child is made until he is two years behind his expected grade—thus being certain that the child has well-grounded habits of failure before acting—there is on the whole a healthy tendency towards realizing the devastating effect of failure and thus towards accepting a certain responsibility for later adult mental attitudes.

Second, there has been growing realization that the school is quite as responsible for formation as for information. As our general philosophy has awakened to the fact that the child is ac-

tually an individual, rather naturally have we seen that his school period is life quite as much as preparation for life. This has opened a vista of school adjustments as life adjustments—a vista as yet almost entirely unexplored.

Third, there has been growing realization that truancy and other infractions of rules are the natural, expected indicators that in some way the child in his environment is not having his fundamental needs met. The officer to make the child go to school is an anachronism. The whole emphasis is shifting towards some type of social diagnosis that comprehends and seeks to ameliorate those conditions in the total life of the school child that are the cause of infraction.

Fourth, there has been growing realization that the child is largely the product of the strivings, needs, lacks and richness of his whole environment. The school is waking to its vital interest in and responsibility for these environmental factors. This is in no sense because the school is expected to assume all responsibility for the child's rearing. Indeed, any social development that involves a shifting of responsibility from any part of the child's total environment is unsound. The fact rather is that as the schools have been changing their emphasis from the thing taught to the person taught, so will they realize that the person taught is no isolated museum specimen but one clothed (mentally and physically) by his family, nicknamed (mentally and physically) by his neighborhood, bent (mentally and physically) by all those burdens involved in the earning life of himself and his family. For many of these factors the school will undoubtedly assume total responsibility at least for a time (note its rather timid reaching out into nursery schools, visiting teacher and recreational fields), but the social fabric will be weakened if this movement is one of removing rather than educating to responsibilities. The child taught is a 24-hour and 365-day child, and the schools inevitably, as a logical sequence of their present recognition of the importance of how children learn rather than what children learn, will deal with him as such.

The child is individual, the school social. Between these there will always be stress, maladjustment and delinquency. Yet those conflicts, numbing mental attitudes and serious conduct disorders that arise from these earlier difficulties will disappear as the teacher less and less interests herself in what the child did, and more and more in why he did it.

In something of a mad rush to consummate these latter goals the traditional in the schools is being rather trampled underfoot. But the solidarity of the group, its minimum standards of citizenship, its inculcation of the rich heritage of experience are essential—essential for the security of the group, necessary for the child who is to adjust to the group.

For him who guides the delinquent, the matter of days attended, of intelligence quotient, of disciplinary troubles, should be but the clues that lead to what the teacher, the fellow-pupils, the curriculum, the school mean to the child in answering his craving for security and development. As it is true that we live by what we feel rather than by what we know, so is always the primary question not "What does the child learn in school?" but rather "How does the child feel because of school?"

The Child and the Church

There has been practically no valid statistical study of the relation of the church to juvenile delinquency. The listing of the "religion" of the delinquent has been a tabular enterprise that in no sense comprehends any of those deeper spiritual values which, it seems evident, the church might represent to the child.

Among the child's security needs is the satisfaction in an ever-widening field of a craving for affection and understanding that comes from beyond even the widest of human relationships. Our growing urbanization (tending so definitely to hide from the child the elemental forces of nature) has not, despite appearances, altered this need. Furthermore, in the growth needs of the child lies basically the need of accepting himself as being in harmonious relation with an ordered universe and with an ultimate destiny. While undoubtedly for many children these needs are answered through the apparent security and at-ease-ness of those adults who immediately surround them, yet it has been the Church which has through the ages ministered to these cravings. Through its assurance of a Supreme Power, in one manner or another, the security cravings of individuals have been satisfied. Through its age-old preservation of beauty and vision and its sanction of defined rules of conduct it has guided and supported the development of the child.

MACHINE AGE AND BREAKS FROM TRADITION

Our present situation impels two important considerations: (1) The dazzling power of man-made machinery easily lulls the child into feeling that here lies security. Far from offering new spiritual values for old, the trend of our age has been to replace these values with the apparently omnipotent lure of the machine. And (2), we live in an age of challenge—quite without any sense of varying values in what is old and stable, we have largely habituated ourselves and our children to question the validity of all that is traditional. Our heritage of the tried rules of living together, of beauty and of strength, has been seriously threatened in the sudden acclaim that only that has worth that is new. We feel confident in the view that this period of change engenders factors of stress that are of outstanding importance in the incidence of delinquency.

SIGNIFICANCE OF THE CHURCH

Two widely divergent views are currently given as solutions. One sees real progress only on the basis of a wholesale integration into our life of an earlier unquestioning acceptance of the dogma and practices of the respective religious organizations. Unfortunately this view has led many to no more than the cry that we go back to something. But the past is vibrant only as it is built into the future. The cry that we "go back to the good old days" is the cry of the timorous. The other view involves an equally wholesale disposal of theological sanctions in our conduct. On this basis those needs of the child that are fundamental and basic are considered as no more than bonds and trammels that impede free progress.

Two connotations are of the deepest significance: First, there must develop some consonance between the Church and its teaching and the age in which we live. Whether the Church is to mold itself to new social conditions or whether we are to see only ourselves behind the dazzling theories and powerful machinery which characterize our age is not pertinent here. Yet, assuredly, the problems of maladjustment will continue to stagger us until this consonance appears in some form. The second connotation is more personal and immediate. The child can be educated to those sacrifices that are inevitable in meeting the duties and responsibilities of living with others only when he has been given in some way

the sense of accepting himself as being in harmonious relation to all that is about him. He who guides must remember the child's basic security and growth needs in their widest meaning and must discover to what extent the Church tie of the delinquent is fulfilling these needs. It is as empty simply to title the child as a member of some religious organization as it is to record the color of the clothes his parents provide for him. The question is that of what the Church means in his life. The deeper question is whether one can through his own example or through education lead the child to some real satisfaction of his craving for an affection that reaches out beyond the farthest human units and for a feeling that the well-ordering of his own life is dictated by something more than the conventional approval or the crude condemnation of society.

The Child in Relation to Industry

Whether indirectly through his parents or directly in answer to his physical needs or emotional drives, industry insistently presses upon the child in every moment of his life. Security to industry must largely be measured in financial terms by profit. There must not be waste. Each by-product is to be turned to account. Tragically has this caught up the employed, for the industrial age has little seen human maladjustment as waste or human satisfaction as a by-product of essential worth. The products of individual craftmanship are eloquent testimony to the richness of emotional satisfaction possible in the earning life of the worker. There is, too, something grotesque in the theory that a high standard of living can be solidly built upon a culture in which the employee ever the more automatically earns in part of the day that he may ever the more feverishly seek emotional satisfaction in another part of the day. One of the pervasive elements in the background of our present problem of delinquency is this difficulty that the young person has in finding real satisfaction in his actual earning life. In brief, the factors seem chiefly to be: (1) The actual physical strains and hazards and moral dangers involved; (2) the factor of inadequate training; (3) the job's failure itself to give adequate emotional satisfactions; and (4) industry's part in the crumbling of traditional structures.

HAZARDS OF EMPLOYMENT

The moral and physical hazards of street trades, the physical and mental deprivations involved in industrial employment of the immature, the demoralizing effects of unemployment on the young wage earner are being recognized as real detriments in the life of the child, and some of these factors are more and more the subject of protective legislation. The migratory family involved in certain seasonal pursuits, which create serious physical and educational problems for the children, has become fairly well known but is still largely beyond control.

ATTEMPTS TO MEET PROBLEM

The majority of the great number of children who leave school between the fifth and ninth grades do so because for them or their families the life of the earner offers greater attractions than the life of the learner. Their early employment usually makes it difficult or impossible for them to prepare for a satisfactory earning life and may seriously handicap their physical and emotional development. Four rather distinct efforts are made to meet this problem: (a) public opinion, of which child labor and school attendance legislation are an expression, is compelling children to remain in school longer through raising the school age and the grade requirements; (b) schools for vocational training have been established, but with the difficulty that in large part the admission demands are often too high for those children with whom this report is particularly concerned; (c) the school is in certain places awakening to the problem of making its work so interesting and worth while, so well adapted to the child's needs and abilities, and so clearly helping the child to prepare for his future earning life, that children (and, for them, their parents) will definitely desire to remain in school; finally (d) the continuation school, in many instances a poor makeshift in the transposition of the child from school to earning life, has in certain instances tied itself in with the happiness and betterment of the child at work. The last two methods represent effective, if belated, efforts at coordinating the earning and learning life, that is, at re-assembling the individual which our highly specialized age has so successfully dismembered.

MECHANIZATION

Mass production has tended to individual specialization, "big business" to individual stratification, and labor-saving devices to individual automatization. Employers testify to present-day lack of loyalty, irresponsibility, time-clock hyperaesthesia, apparently without realizing that increased mechanization is squeezing the job itself singularly dry of those challenges which the employee seeks. As long as the youth's needs for security and development are not met in the job itself, just so long will he ever more vigorously seek emotional satisfaction in the few free hours of the day left him, or drift from one job to another, many joining the ranks of those who live by lawlessness. This is maladjustment.

TRADITIONAL HOME SUFFERS

Women's increasing entry into industry and the tendency that they continue working after marriage has meant either delay in marriage or that for many of those who marry young the step is taken on little more than a furnished-room basis. Thus there has rather suddenly appeared a form of family life without permanent home, or without common ties of things owned, or without any immediate prospect of meeting their common responsibility if they have children. Periods of change are periods of stress. They are accompanied by a high rate of maladjustment and delinquency.

INDUSTRY'S RESPONSIBILITY

The way out rests in the recognition that for the young person at work and for his family, industry has a responsibility beyond that of immediate profit. We have high belief that the social engineer can show the significance of the vast cost of human waste and that the apparent profit of industry must pay its share in the mounting cost of maladjustment. Truly in this way are the problems of delinquency and maladjustment in part the employers' own problems. The way out rests, more specifically, in the recognition that a machine age does not need to use young children in industry; that inefficiency is more expensive than payment of wages necessary to obtain more mature workers; that for those employed, development of interest, satisfaction, and loyalty are essential no matter what the efficiency of the machine; and that schools must be enabled to take more and more responsibility in

preparing pupils for successful adjustment in industrial life, since young persons, by compulsion of law or by choice, are remaining under their control for longer and longer periods.

In the prevention of delinquency no problem has more of interest than the re-introduction of adequate emotional satisfaction into the actual earning life; in the cure of the delinquent nothing is of more moment than that when he comes to earn, his job in itself really shall interest and challenge him.

The Child in Relation to Community Agencies, Groups and Influences

Fundamental in the present situation is the unprecedented rôle that the community plays in the child's life. Apartment life and its consequences, the restriction of the physical arena of family life, the easy access of outside influences through the news, the automobile, and the radio constitute community influences which perhaps never before have had a larger part in the life of the individual. The immense commercialization of recreation, the national organization of recreational agencies, the syndication of news and opinion—these community influences perhaps never before have been so utterly beyond the control of the individual.

COMMUNITY RELATIONSHIPS

In the community, as surely as in his own family, the child has need for security and need for growth. And as surely will he seek to satisfy these needs in distorted and delinquent ways if he cannot find in the community the opportunities for wholesome satisfaction. There is this important difference—in the family the child largely has status due to who he is; in the community his status rests on what he is or what he has. Thus now do appearance, possessions, street address become of transcending importance. These material signs of status have always intrigued the community. Even most of our research as to delinquency and crime has dealt only with these physical symbols.

That is, community relationships represent for the child a new voyage of exploration and conquest.

THE NEIGHBORHOOD

The earliest, the most common, the most natural of these relationships is the neighborhood group or gang. Such importance

has been given to the demoralizing effect of these groups that we are prone to forget their spontaneity, their richness of active recreation, their outstanding importance as among the early teachers of community duties and privileges. No social engineer can build solidly who fails to use for his corner-stone the body and spirit of the neighborhood group.

Certain individuals—both within and without the settlement houses—have rather notably caught, preserved and woven into their own power of leadership, the spirit and integrity of the neighborhood group. Playgrounds have apparently in their immediate areas decreased apprehended delinquency. Their course must be plotted with the following in mind: (1) Most young children like to play near home; (2) most children prefer to cling to the hurly burly excitement of the streets; and (3) most children look rather askance at outside organization of their play. In this ever-increasing movement to set the child's life in order we rather lose sight of his need and inherent right to waste a fair part of his time.

THE SCHOOL

That the school plant should be used constantly for the most wide-flung community activities is economical and just. Yet, here, as in the matter of the playground, there is the danger that the power and solidarity of the school will lead it to dominate the neighborhood group rather than to conserve the distinctive values inherent in it.

ORGANIZED ASSOCIATION

Going to the still wider national field, we find organized recreational movements of which the Boy Scouts, Girl Scouts and Campfire Girls are notable examples. Here again are the problems of standardization. One of the natural by-products of a common ritual and symbolization (so necessary for most of us!) is an increasing number of misfits. These organizations are performing an outstanding service in providing healthy outlets for children. With some notable exceptions they have not embraced the delinquent or his problem.

Of practically as extensive organization are the various commercialized forms of recreations. Answering with incredible ease our vast needs for stimulation, education and freedom from provincialism, they have more and more tended to provide for us what we earlier had to provide for ourselves. One stands aghast

at the passivity of much of modern recreation. For these ventures, profit rather than social health must be chiefly the goal, and the organization has largely lost its local flavour, that is, the body and spirit of the neighborhood association. It is no mere provincialism to see in the spontaneity and richness of the neighborhood group the possibility of the most wholesome and understanding view of the needs of its children.

THE PRESS

Of these organized community influences perhaps the one most formative of public opinion is the press. The press rather largely claims that it gives to the people what they want. It seems a bit incongruous that any sizable group of parents could desire for their children the amount of space and importance that is thus given to the criminal element of the country. Undoubtedly this news is thoroughly protected with adequate and well-expressed condemnations, but space and headlines mean more to the child. Infamy and fame are not to him distinguished by mere words no matter how finely turned. A nation that has conquered great material difficulties and harnessed its physical powers must have some more effective means of combatting the cynicism of its youth.

NEIGHBORHOOD AND NATIONAL SPIRIT

Intangible—and yet more real than any other community influence—is the spirit of the child's neighborhood. Certain sizable areas produce a high percentage of our delinquents. In those "areas of delinquency," the non-delinquent is odd, different, insecure. Nor is this spirit of the community to be limited here because in certain ways the spirit of the nation—the "Spirit of our Times"—molds the child. Two influences are perhaps outstanding: First, we seek the new, the startling, that which excites. We forget that in all else the child's life should move forward in orderly fashion with a certain physical and intellectual cadence. Certainly unhappiness and maladjustment have as one of their sources early emotional satiation in our ever-more-hurried presentation to the child of increasingly stimulating emotional experiences.

Second, we have been termed the most lawless nation in the world. This is not merely that we have so many laws that any one enactment loses sanctity. This is not merely that the administration of criminal law has failed to keep pace with our urbaniza-

tion. This is not merely that we feel that individual rights stand above the law. Deeper than all this lies a form of lawlessness that pervades our whole people, that infects our children, originating as the tragic result of our unlimited natural resources, the facility of their wealth and the apparent omnipotence of our machinery, and passing on the heritage in our generation of the vicious belief that somehow more can be gotten out of life than one puts into it. This truly in its deepest and most devastating sense is a belief in lawlessness.

PROBLEM OF ADMINISTRATION

For him who has the delinquent in charge the community influences are of transcending importance. The neighborhood gang—the delinquent's naturally agglomerated companions—must be a unit of his labor. That the delinquent in this group and this group in its neighborhood shall have real security and the opportunity for wholesome development is of the greatest importance. We see with awe the tremendous forces in the development of our great cultural patterns. That a technique for their guidance awaits development is perhaps today the most intriguing of the challenges that face the social engineer.

RECOMMENDATIONS

The way out? Throughout the various sub-committee reports have appeared recommendations. Sometimes present steps are in the wrong direction—more disturbing is the fact that we often so thrill over them as to forget that they have validity only as they lead to other steps. It is submitted that 3 implications in the entire report transcend all others. They represent those goals which we are always to keep before us, those which when finally attained will only the more clearly show us further goals.

A. Generations that have gone before have stressed primarily that the environment has a clear duty toward the child—and this the committee reaffirms. It is submitted that this then takes precedence over any other consideration of expedience or artifice:

   (1) That the guardians of the child have a duty to develop in him regular and correct habits of living.
   (2) That the guardians of the child have a duty to provide some such richness of wholesome ideas and interests as

can answer his ideational needs. Nor is it sufficient to use casual amounts of constructive and healthy material as coloring matter for the great masses of sensationalism and artificial stimulation to which the child is subjected.

(3) That the guardians of the child have the duty to present in their own lives such patterns of honesty, sincerity and courage as shall challenge the child's emulation. In an age when mechanical devices bring distant wonders, and the spread of wealth provides ease and comfort beyond our wildest dreams, it is of the gravest importance that all adults realize that by no such trickery is the matter of wholesome life produced. It is only in the example of sincere living that the child finds the dynamic impulse for his own wholesome development.

B. The committee affirms the recognition of delinquent conduct as one of the natural outcomes of those clashes of interest, prerogative, and need that are inherent in the matter of living as a social group. Finding fault, laying the blame —that most paralyzing and childish of all our human interests—in the past has largely invaded the philosophy of delinquency. The point in hand is not so much that delinquency is inevitable as that we appreciate the naturalness and ubiquity of those processes which lead up to it. This is fundamentally a matter of recognizing that the stresses which bend the delinquent are of precisely the same character as those which bend our own lives. The needs which have been pictured are those which are of the lives of all of us. It is submitted that all of us, too, have to meet the more unyielding molds of the various institutions which surround us. As we see the delinquent as a part of this natural and inevitable clash we naturally bring into our concepts a dispassionate attitude which (perhaps for the first time) will allow us to consider the problem of delinquency in a way that leads to some real solution. Thus can we place ourselves in a position to test out our work with the child, whether we focus on the treatment of the child's problem in relation to himself, his family, the State, the school, industry, the church or community forces.

C. There still exists every degree of attempt at understanding the delinquent; there is much that is merely empty aping. Yet the past generation has taken a real step beyond the hit and miss treatment of the problem. It is submitted that now we can understand and help the delinquent only:

(1) When we seek the widest expert knowledge and the deepest understanding of the child in relationship to himself, of his weaknesses, strengths and latent possi-

bilities for a fuller life; when we rid ourselves of any hampering appraisal in terms of fault; and when we bend every effort towards building such wholesomeness of body, mind, ideational and emotional life as will render the child a dynamic personality able to meet the rigorous demands of social living.

(2) When we so know the members of his family that we understand each in his relations to himself, and to each other member, especially to the child; and we go beyond the matter of lengthy inventory to know the needs and visions of each, since these are, at once, the trammels and promises of the child's own life, dispassionately seeking to foster a better balanced integration for the whole.

(3) When we recognize that all legally constituted authority has the duty to the child to aid and educate, not to punish; and when we see the clear necessity for the highest type of service, special knowledge and sympathetic understanding in juvenile court, probation office, institution throughout the nation.

(4) When we clearly follow through the child's security and development needs in all of his complex adjustment to the demands of school; and when we find out exactly why he is failing and where he may succeed, and realize that the school means in all its drama of social duties and privileges, far more than merely a dispenser of academic education.

(5) When we know what the power and traditional position of the church actually mean to the daily life of the child; and we recognize and teach that there are certain spiritual values that are essential to the happiness and wholesomeness of the child's life.

(6) When we learn whether the youth's earning adjustment has other satisfactions than the pay envelope; and when we accept the responsibility of aiding him in every way towards a position that contains those elements of challenge, interest and satisfaction which give a return far beyond the financial.

(7) When we know the members of his group as well as we know him; when we catch the strength and promise inherent in the spontaneous friendship of that group; and finally when we make as sincere an understanding effort to reconstruct the group as we do to reconstruct the delinquent himself.

No longer may we hale into our presence the parent, the teacher, the pastor, the employer, the policeman, the recreation leader, merely to ask that they give needed information as to the child

before us. The lives of these persons—their needs, longings and visions—are an integral part of the life of the child. Only as all these actually join in a great cooperative enterprise, only as we sense and build with their needs, longings and visions, can the delinquent be understood and his needs met. Nor will delinquency lessen until we understand the delinquent.

APPENDIX

Section and Committee Chairmen

The names, addresses, and professional affiliations of the entire membership of the White House Conference on Child Health and Protection appear in the official Directory of Committee Personnel.

SECTION I.—MEDICAL SERVICE

Samuel McC. Hamill, M.D., *Chairman*

A. Growth and Development . . *Kenneth D. Blackfan, M.D*

B. Prenatal and Maternal Care . *Fred L. Adair, M.D.*

C. Medical Care for Children . *Philip Van Ingen, M.D.*

COMMITTEE I A.—GROWTH AND DEVELOPMENT

(This committee functioned through individuals and small groups, and submitted no sub-committee chairmen names for publication.)

COMMITTEE I B.—PRENATAL AND MATERNAL CARE

(1) Obstetric Teaching and Education	*Fred Lyman Adair, M.D.*
(2) Maternal and Early Infant Care	*John Osborn Polak, M.D.*
(3) Interested Organizations . . .	*Robert D. Mussey, M.D.*
(4) Factors and Causes of Fetal, Newly-born, and Maternal Morbidity and Mortality . .	*Hugo Ehrenfest, M.D.*
(5) Basic Sciences and Maternal and Fetal Problems	*Leslie B. Arey, Ph.D.*

COMMITTEE I C—MEDICAL CARE FOR CHILDREN

(1)	Plan and Scope	*Philip Van Ingen, M.D.*
(2)	Questionnaire and Statistics .	*George T. Palmer, Dr. P.H.*
(3)	Medical Education . . .	*Borden S. Veeder, M.D.*
(4)	Private Practice	*Isaac A. Abt, M.D.*
(5)	Hospitals and Dispensaries .	*Clifford G. Grulee, M.D.*
(6)	Convalescent Homes and Care	*Adrian V. S. Lambert, M.D.*
(7)	Health Centers	*J. H. Mason Knox, Jr., M.D.*
(8)	Health Promotion Agencies .	*William De Kleine, M.D.*
(9)	Psychology and Psychiatry .	*Bronson Crothers, M.D.*
(10)	Orthopedics and Posture .	*Robert B. Osgood, M.D.*
(11)	Dentistry and Oral Hygiene	*Percy R. Howe, D.D.S., D.Sc.*
(12)	Nursing	*Stella Goostray, R.N.*
(13)	Medical Social Service . .	*Ida M. Cannon, R.N.*
(14)	Nutritional Activities . .	*Lucy H. Gillett*

SECTION II.—PUBLIC HEALTH SERVICE AND ADMINISTRATION

HUGH S. CUMMING, M.D., *Chairman*

A. PUBLIC HEALTH ORGANIZATION . . *E. L. Bishop, M.D.*

B. COMMUNICABLE DISEASE CONTROL . *George H. Bigelow, M.D.*

C. MILK PRODUCTION AND CONTROL . *H. A. Whittaker*

COMMITTEE II A.—PUBLIC HEALTH SERVICE AND ORGANIZATION

(1) Federal Health Organization .	*Haven Emerson, M.D.*
(2) State Health Organization .	*John A. Ferrell, M.D.*
(3) City Health Organization . .	*Henry F. Vaughan, Dr. P.H.*
(4) Rural Health Organization .	*Allen W. Freeman, M.D.*
(5) Relation of Official and Non-official Agencies in Public Health Organization . . .	*C. E. A. Winslow, Dr. P.H.*
(6) Training of Personnel . . .	*W. S. Leathers, M.D.*
(7) The Administration of Child Health Work as a Part of the Official Health Program .	*Anna E. Rude, M.D.*
(8) Practitioners of Medicine and Dentistry in Relation to Health Programs	*David Chester Brown, M.D.*
(9) Health Aspects of Food Control	*W. S. Frisbie*

COMMITTEE II B.—COMMUNICABLE DISEASE CONTROL

(This committee functioned as a whole, and is without sub-committee divisions.)

COMMITTEE II C.—MILK PRODUCTION AND CONTROL

(1) Communicable Disease . . . . *S. J. Crumbine, M.D.*

(2) Public Health Supervision . . . *Leslie C. Frank*

(3) Nutritional Aspects . . . . . *E. V. McCollum, Ph.D.*

(4) Economic Aspects . . . . . *O. E. Reed*

SECTION III.—EDUCATION AND TRAINING

F. J. Kelly, Ph.D., *Chairman*

A. The Family and Parent Education .	*Louise Stanley, Ph.D.*
B. The Infant and Pre-school Child .	*John E. Anderson, Ph.D.*
C. The School Child	*Thomas D. Wood, M.D.*
D. Vocational Guidance and Child Labor	*Anne S. Davis*
E. Recreation and Physical Education	*Henry Breckinridge*
F. Special Classes	*Charles S. Berry, Ph.D.*
G. Youth Outside of Home and School	*James E. West*

COMMITTEE III A.—THE FAMILY AND PARENT EDUCATION

(1) The Function of Home Activities in the Education of the Child . .	*Ernest W. Burgess, Ph.D.*
(2) Home Management and Equipment	*Martha Van Rensselaer, D. of Ped.*
(3) The Family and Its Relationships	*Ernest R. Groves*
(4) State Programs of Parent Education	*Ruth Andrus, Ph.D.*
(5) Pre-parental and Parental Education . .	*Sidonie M. Gruenberg*
(6) Contributions of Special Organizations	*Judith Clark*

COMMITEE III B.—THE INFANT AND PRE-SCHOOL CHILD

(This committee functioned as a whole, and is without sub-committee divisions.)

(1) Medical Service in Schools .	*Fred Moore, M.D.*
(2) Nursing Service in Schools.	*Elma Rood*
(3) Dental Service and Dental Hygiene in Schools . .	*Harris R. C. Wilson, D.D.S.*
(4) Nutrition Service in Schools	*Lydia Roberts, Ph.D.*
(5) The School Plant, Its Construction, Equipment, Maintenance, and Sanitation .	*N. L. Engelhardt, Ph.D.*
(6) Mental Hygiene in Schools .	*Percival M. Symonds, Ph.D.*
(7) Safety Education in Schools	*Albert W. Whitney*
(8) Social Hygiene in Schools .	*William F. Snow, M.D.*
(9) Health Problems of the Kindergarten	*Julia Wade Abbot*
(10) Physical Education . . .	*J. R. Sharman, Ph.D.*
(11) Health Education in the Elementary Schools . .	*Anne Whitney*
(12) Health Education in Secondary Schools	*Edna W. Bailey, Ph.D.*
(13) Cooperation of Home with School	*Mrs. A. H. Reeve*
(14) Administration of School Health Work	*A. J. Stoddard*
(15) Professional Training of Teachers and Leaders .	*William C. Bagley, Ph.D.*
(16) School Health Legislation	*James F. Rogers, Ph.D.*
(17) School Health Surveys . .	*Edward S. Evenden, Ph.D.*
(18) Rural Schools	*Florence Hale*
(19) Indian Schools	*Edna Groves*
(20) Negro Schools	*N. C. Newbold*
(21) Parochial Schools . . .	*Rev. John M. Cooper, Ph.D.*
(22) Private Schools	*Morton Snyder*
(23) Summer Vacation Activities of the School Child . .	*Wm. H. Kilpatrick, Ph.D.*
(24) The Migrant School Child	*Charles F. Willis*
(25) Health Problems in the Schools of Alaska . . .	*Jonathan H. Wagner*
(26) Health Problems in the Schools of Porto Rico .	*Jose Padin*
(27) Health Problems in the Schools of the Philippine Islands	*Clotilde Patton*
(28) Health Problems in the Schools of Hawaii . .	*Will C. Crawford*

COMMITTEE III D.—VOCATIONAL GUIDANCE AND CHILD LABOR

Vocational Guidance, Edith Campbell, *Chairman*

(1) Organizing the School System for Guidance, Study of the Individual; Counseling; Curriculum Guidance	*Edith Campbell*
(2) Individualized Opportunities for Training	*Edwin A. Lee, Ph.D.*
(3) Occupational Studies and Placement	*Mary Holmes Stevens Hayes, Ph.D.*
(4) Special Problems	*W. Carson Ryan, Ph.D.*

Child Labor, Ellen Nathalie Matthews, *Chairman*

(1) The Child Laborer in Non-agricultural Occupations . . .	*Julia C. Lathrop*
(2) The Child Laborer in Agriculture	*Samuel McCune Lindsay, Ph.D., LL.D.*
(3) Hazardous Occupations, Industrial Accidents, and Workmen's Compensation for Injured Minors	*Fred M. Wilcox*
(4) General Problems of Administration of Laws Affecting Child Labor	*Miss Frances Perkins*
(5) Standards of Wages for Juvenile Employment	*Amy Maher*

COMMITTEE III E.—RECREATION AND PHYSICAL EDUCATION

(1) Recreation and Physical Education in Secondary Schools .	*F. W. Maroney, M.D.*
(2) Recreation and Physical Education in Elementary Schools .	*Florence Somers*
(3) Recreation and Physical Education for Pre-school Ages . .	*Mrs. A. H. Reeve*
(4) Recreation and Physical Education Outside of School . .	*George E. Dickie*
(5) Leadership Training	*James H. McCurdy, M.D.*
(6) Legislation	*Henry Breckinridge, LL.D.*

COMMITTEE III F.—SPECIAL CLASSES

(1)	The Mentally Retarded . . .	*Meta L. Anderson, Ph.D.*
(2)	Behavior Problems	*Harry J. Baker, Ph.D.*
(3)	The Training of Teachers . .	*Charles M. Elliott*
(4)	The Gifted	*Henry H. Goddard, Ph.D.*
(5)	The Blind and Partially Seeing	*Mrs. Winifred Hathaway*
(6)	The Crippled	*Jane A. Neil*
(7)	The Deaf and Hard of Hearing	*Mrs. James F. Norris*
(8)	The Children of Lowered Vitality	*Adela J. Smith, M.D.*
(9)	Defective Speech	*Robert West, Ph.D.*
(10)	Organization and Administration	*Lewis A. Wilson, D.Sc.*

COMMITTEE III G.—YOUTH OUTSIDE OF HOME AND SCHOOL

(1)	Churches	*John H. Finley, LL.D.*
(2)	Girls' Work	*Mrs. Jane D. Rippin*
(3)	Boys' Work	*William L. Butcher*
(4)	Neighborhood Agencies	*Albert J. Kennedy*
(5)	Play-safety	*H. S. Braucher*
(6)	Commercialized Recreation	*Mrs. Henry Moskowitz*
(7)	Motion Pictures and Theatres	*Lee F. Hanmer*
(8)	Radio	*Daniel A. Poling, D.D.*
(9)	Reading	*Carl H. Milam*
(10)	Community Environment	*Clarence A. Perry*
(11)	Camping	*Elbert K. Fretwell, Ph.D.*
(12)	Rural Conditions	*C. B. Smith, D.Sc.*
(13)	Youth in Industry and Business	*C. C. Robinson*
(14)	Institutional Groups	*Leon C. Faulkner*

SECTION IV.—THE HANDICAPPED: PREVENTION, MAINTENANCE, PROTECTION

C. C. Carstens, Ph.D., *Chairman*

A. State and Local Organizations for the Handicapped . . . . . *Mrs. Kate Burr Johnson*

B. Physically and Mentally Handicapped . . . . . *William J. Ellis*

C–1. Socially Handicapped — Dependency and Neglect . . . . *Homer Folks*

C-2. Socially Handicapped — Delinquency . . . . . *Frederick P. Cabot*

COMMITTEE IV A.—STATE AND LOCAL ORGANIZATIONS FOR THE HANDICAPPED

(1) State Departments	*Sophonisba P. Breckinridge*
(2) Form and Equipment . . .	*Agnes K. Hanna*
(3) State Supervision of Private Institutions and Agencies .	*James H. Foster*
(4) Inter-State Problems . . .	*Mrs. A. M. Tunstall*
(5) Direct Care	*Richard K. Conant*
(6) Educational Policies for Promoting Social Work Programs	*Mrs. S. H. Bing*
(7) Administration of Local Units of Child Care and Protection (Including County, Township, and Regional Units) . . .	*H. Ida Curry*
(8) National Private Organizations	*Walter Pettit*
(9) Private Agencies and Their Relationship to Public Agencies	*Wilfred S. Reynolds*
(10) Federal Government and Child Welfare	*William Hodson*

COMMITTEE IV B.—PHYSICALLY AND MENTALLY HANDICAPPED

(1) The Deaf and Hard of Hearing .	*Josephine B. Timberlake*
(2) The Blind and Visually Handicapped	*Robert Irwin*
(3) The Crippled	*Harry H. Howett*
(4) Internal Conditions	*LeRoy A. Wilkes, M.D.*
(5) Problems of Mental Health . .	*Lawson G. Lowrey, M.D.*
(6) Problems of Mental Deficiency .	*E. R. Johnstone*
(7) Vocational Adjustment of the Physically and of the Mentally Handicapped	*Emil Frankel, M.D.*

COMMITTEE IV C–I.—SOCIALLY HANDICAPPED—DEPENDENCY AND NEGLECT

(1) Care of Dependent Children in Their Own Homes . . . . *Solomon Lowenstein*

(2) Methods and Standards of Care for Children Elsewhere than in Their Own Homes . . . . *J. Prentice Murphy*

(3) Legal and Social Aspects of the Rescue and Treatment of Neglected Children . . . . . *Theodore R. Lothrop*

(4) Child Dependency as Affected by Race, Nationality, or Mass Migration

(*a*) The Negro Child . . . . . *Eugene Kinckle Jones*
(*b*) The Mexican Child . . . . *Rev. Robert E. Lucey*
(*c*) The Porto Rican Child . . . *Rev. Bryan J. McEntegart*
(*d*) The Indian Child . . . . . *W. Carson Ryan*

(5) Joint Committees:

(*a*) Training and Personnel . . . *Edith Abbott*
(*b*) Social Statistics . . . . . *Henry W. Thurston*

COMMITTEE IV C–2.—SOCIALLY HANDICAPPED—DELINQUENCY

(1) The Child Himself	*William Healy, M.D.*
(2) The Child in Relation to the Family	*Almena Dawley*
(3) The Child in Relation to the School	*Elizabeth Lindley Woods, Ph.D.*
(4) The Child in Relation to the State and Municipality . . .	*Calvin Derrick*
(5) The Child in Relation to Industry	*James S. Plant*
(6) The Child in Relation to Community Agencies, Groups and Influences	*Jessie Binford*
(7) The Child in Relation to the Church	*Louise McGuire*

SECTION II C.—COMMITTEE ON MILK PRODUCTION AND CONTROL

Your committee has directed its efforts towards collecting information on milk that would be of value to the Conference in promoting and protecting the health and welfare of the child.

The different phases of milk selected for study were (1) its relation to communicable disease, (2) its public health supervision, (3) its nutritional aspect, and (4) its economic aspect. The committee, in order to facilitate its work, was divided into four sub-committees, each of which has considered one of these phases of the subject.

The Sub-committee on Communicable Diseases transmitted through milk collected information on the human and bovine diseases that may be or are milk-borne, the epidemiological evidence of each disease, and the number of recorded outbreaks of disease traced to milk or milk products during the past six years.

The Sub-committee on the Public Health Supervision of Milk obtained information on the essential elements of milk supervision, the legal aspect of its supervision, the measurement of the results of milk supervision effort, and the present status of milk supervision in this country.

The Sub-committee on the Nutritional Aspects of Milk considered the nutritive properties of cow's milk and milk products, and the nutritive properties of human milk.

The Sub-committee on the Economic Aspects of Milk obtained information on the consumption of fluid milk and other milk products, the production, marketing, transportation, processing, and delivery of milk, and the economic importance of the sanitary quality of milk and cream.

For the purposes of this report, each sub-committee has presented a brief statement containing the conclusions it has drawn from its studies, and its recommendations based thereon. The individual sub-committee reports follow:

COMMUNICABLE DISEASES TRANSMITTED THROUGH MILK

Our newest and freshest food that we consume in some form every day is at the same time the oldest known food of which there is an accurate historical record.

Archeologists have recently discovered on the façade of the temple at Ur a milking scene, thus as long ago as 4000 B.C. milk was an important source of food in that ancient civilization of the Chaldees.

The Bible has many references to milk.

The wise King Solomon admonished his people "to have goat's milk for the food of thy household, and for the maintenance for thy maidens." No wonder he is represented to be the wisest man in the world!

All down the ages, history records the use and importance of milk as a food. Even the legendary tales of ancient Rome recite the most astonishing and magical event of the twin boys, Remus and Romulus, afterwards the founders and heroes of Rome, who, as children, were abandoned in a cave to perish, but who were miraculously nurtured by a she-wolf with her milk until they were found and rescued.

These actual and legendary records but emphasize the fact of the important place as a food that milk held during all the ages of recorded history.

Babies, who were denied mother's milk, have been dependent for their nourishment and, indeed, their life, upon milk from some one of our domestic animals, usually the cow, goat, ass or camel.

Unwholesome Milk a Life Hazard

The production of an abundant, safe and wholesome milk supply has been attended with great difficulties and its success or failure has, in a large measure, conditioned the life hazard of babies who could not be breast-fed, as revealed in the infant mortality tables of the various countries of the world, particularly mortality due to the diarrheal diseases. Not only is the life hazard of bottle-fed babies most favorably influenced by a pure and wholesome milk supply; but the average level of robust health of infant, child and adult, as expressed in normal nutrition and vigorous resistance to disease, is enormously increased and promoted, for milk and milk products have become one of our most

important and indispensable foods in the daily dietary of America.

The tremendous increase in production and consumption of milk and milk products has brought with it problems relating to its safety and wholesomeness.

The recurring milk-borne epidemics with their annual total of sickness, deaths and economic loss should be considered in the light of impressive evidence that milk control officials, milk distributors and dairymen have a tremendous responsibility in securing for the consuming public a clean and safe milk. The evidence that this responsibility has not yet been fully met is presented in Table I on page iv, milk-borne epidemics occurring in the United States during the past six years.

A review of the milk-borne epidemics for 1929, compared with the five-year period 1924–28, is not very reassuring from the standpoint of reduction of epidemics and in cases of illness therefrom with their attendant deaths.

Table Number II reveals the situation as reported by the several state health officers of the United States.

Table Number III sets forth the sources of milk infection as disclosed by the reports from the State Departments of Health. Of the forty-four epidemics, thirteen were traced to chronic carriers of disease; eighteen to sick persons continuing to work in the dairy—so-called ambulatory cases; five epidemics were reported to be due to contaminated and unsterilized bottles which were returned from homes where sickness prevailed; four were said to be due to the polluted water supply; and one is attributed to diseased dairy cows. "Carriers" and "cases on dairies," the two most frequent sources of milk infection, combined caused thirty-one epidemics or seventy-six per cent of the total, involving 1836 or ninety per cent of the cases, and twenty-three or fifty-one per cent of the deaths.

Cooperative Efforts toward Wholesome Milk

In the fall of 1923 the American Child Health Association, in cooperation with the Conference of State and Provincial Health Authorities and the Association of Dairy, Food and Drug Officials, inaugurated what was announced at the time as "A Nation-wide movement to secure for every baby, child and adult in America a clean and safe milk supply." This cooperative work has been carried on continuously since its inauguration. Up to 1930 twenty-

TABLE I

UNITED STATES—NUMBER OF MILK-BORNE EPIDEMICS, CASES AND DEATHS BY DISEASE AND YEAR DURING PAST SIX YEARS, 1924–1929

(Reported by State Health Officers)

Disease	Number of Milk-Borne Epidemics, Cases and Deaths																										
	Six Years			1929				1928				1927				1926				1925				1924			
	Epidemics	Cases	Deaths	No. of States Reporting	E	C	D	Sts.	E	C	D	Sts.	E	C	D	Sts.	E	C	D	Sts.	E	C	D	Sts.	E	C	D
All Diseases	258	10,906	371	48	44	1959	48	48	36	2021	87	48	27	770	34	45	66	2866	70	33	44	1916	42	32	41	1374	90
Diphtheria	8	208	1	0	0	...	...	1	1	72	0	1	1	9	0	2	3	64	0	2	2	40	1	1	1	23	0
Dysentery	1	8	0	1	1	8	0	0	...	...	...	0	...	...	...	0	...	...	...	0	...	...	...	0	0		
Gastro-enteritis	4	391	0	0	...	...	...	1	1	84	0	0	...	...	...	2	3	307	0	0	...	...	...	0			
Paratyphoid	3	93	1	1	1	38	1	0	...	...	...	1	1	45	0	1	1	10	0	0	...	...	...	0			
Poliomyelitis	1	11	2	0	0	...	...	0	...	...	...	0	...	...	...	0	...	...	...	1	1	11	2	0	...	...	...
Scarlet Fever	34	1,974	10	5	9	722	1	6	8	443	5	3	3	224	0	3	4	205	3	4	5	138	1	4	5	242	0
Septic Sore Throat	22	4,161	76	5	7	739	13	3	3	1080	49	1	1	139	3	3	4	1038	9	5	6	1085	2	1	1	80	0
Typhoid Fever	177	4,019	281	18	25	450	33	12	18	310	33	15	19	346	31	23	51	1242	58	10	30	642	36	21	34	1029	90
Undulant Fever	8	41	0	1	1	2	0	3	5	32	0	1	22	7	0	0	...	...	...	0	...	...	...	0			

Sts. = Number of States Reporting. E = Number of Epidemics. C = Number of Cases Involved. D = Number of Deaths.

TABLE II

UNITED STATES—1929 MILK-BORNE EPIDEMICS, CASES AND DEATHS BY DISEASE COMPARED WITH THOSE OF THE PRECEDING FIVE YEARS

(Reported by State Health Officers)

Disease	Milk-Borne Epidemics, Cases and Deaths												
	1929							Five-Year Period—1924 to 1928					
	No. of States Reporting	Epidemics		Cases		Deaths		Epidemics		Cases		Deaths	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All Diseases	.....	44	.....	1959	.....	48	.....	214	.....	8947	.....	323	.....
Diphtheria	0	0	.....	.....	.....	....	.....	8	3.73	208	2.32	1	.30
Dysentery	1	1	2.27	8	.41	0	0						
Gastro-enteritis	0	0	.....	.....	.....	....	.....	4	1.86	391	4.37	0	.0
Paratyphoid	1	1	2.27	38	1.93	1	2.0	2	.93	55	.61	0	.0
Poliomyelitis	0	0	.....	.....	.....	....	.....	1	.46	11	.12	2	.61
Scarlet Fever	5	9	20.45	722	36.85	1	2.0	25	11.68	1252	14.00	9	2.78
Septic Sore Throat	5	7	15.90	739	37.72	13	27.08	15	7.00	3422	38.24	63	19.50
Typhoid Fever	18	25	56.81	450	22.97	33	68.74	152	71.02	3569	39.89	248	76.78
Undulant Fever	1	1	2.27	2	.10	0	0	7	3.27	39	.43	0	.0

TABLE III

UNITED STATES—SOURCES OF MILK INFECTION BY DISEASE. 1929 MILK-BORNE EPIDEMICS, CASES AND DEATHS

(Reported by State Health Officers)

Disease	Source of Milk Infection																		Total All Sources		
	Unknown			Carrier			Case on Dairy			Case on Route (Returned Bottles Unsterilized)			Dairy Water Supply			Dairy Cows					
	Epidemics	Cases	Deaths	E	C	D	E	C	D	E	C	D	E	C	D	E	C	D	E	C	D
All Diseases	3	123	3	13	254	11	18	1391	12	5	142	19	4	47	3	1	2	0	44	1959	48
Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	0	0
Scarlet Fever	...	...	...	...	...	...	8	716	1	1	6	0	...	...	...	...	...	...	9	722	1
Septic Sore Throat	1	100	3	...	...	...	6	639	10	...	...	...	...	...	...	...	...	...	7	739	13
Typhoid Fever	1	15	0	12	216	10	4	36	1	4	136	19	4	47	3	...	...	...	25	450	33
Undulant Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	0	1	2	0
Paratyphoid	...	...	...	1	38	1	...	...	...	...	...	...	...	...	...	...	...	...	1	38	1
Dysentery	1	8	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	8	0

nine states and one Province of Canada have been surveyed as to the condition of milk production and distribution in fairly representative sections of the States. The result of these surveys shows that the milk supply in the smaller cities and country towns is not generally produced and distributed under such sanitary conditions and safeguards as to ensure a safe supply of milk to the ultimate consumer. In these smaller communities a very meagre percentage of the milk is pasteurized, thus the continuing annual epidemics of milk-borne diseases need not be a matter of surprise, although it is a matter of great concern from the standpoint of public health. This point of view is justified because of epidemiological evidence which is shown in Tables IV and V.

Incidence of Milk-borne Epidemics

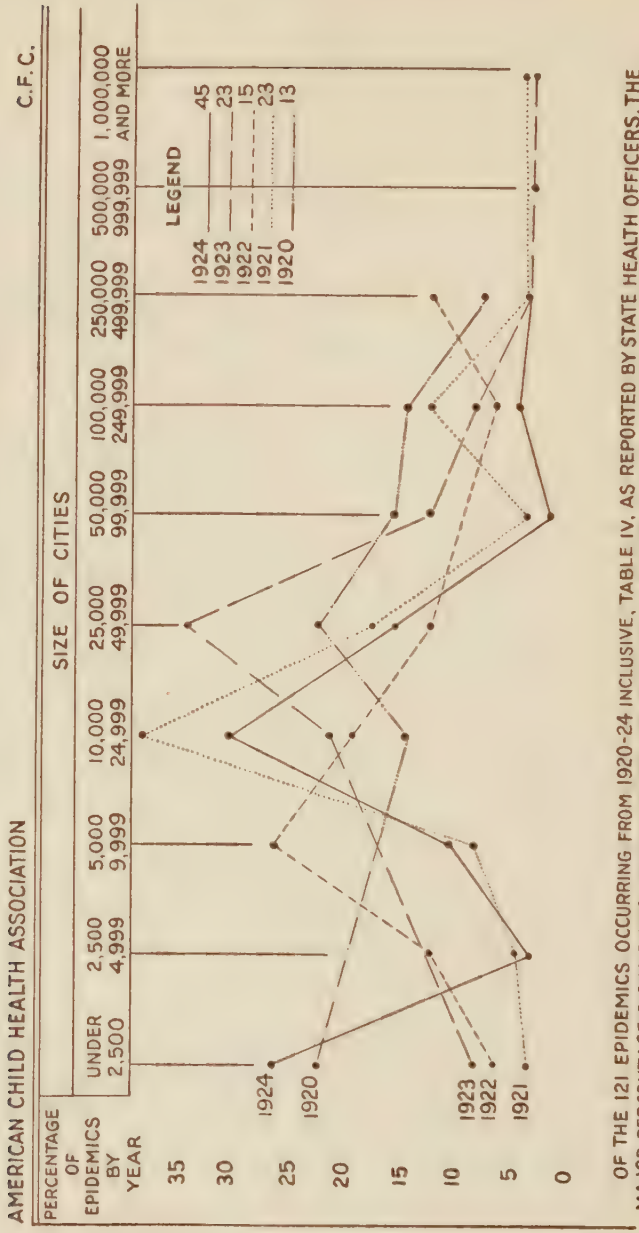
The probable reason for the higher incidence of milk-borne epidemics in the small country towns and rural sections and the cities of from 5,000 to 25,000, is that in such communities we find the largest population groups being served almost wholly by raw milk, that is, not produced under effective, or in the majority of instances any, source of continuing milk control. From these studies one may fairly conclude that in the average American city of from 5,000 to 25,000 population and the small towns and rural communities one may expect to encounter the greatest health hazard in relation to the consumption of unpasteurized milk.

If we may use milk supply control as an indication of sanitary development, health department practice of the small town is still in its infancy. This milk supply is little better in sanitary quality than it would have been if approved processes of pasteurization had never been discovered. The large cities have long recognized the protection afforded by pasteurization and thus, so far as milk-borne diseases are concerned, are reasonably well protected. The problem of the small town and city is to awaken its citizens to the need for the protection of clean milk, rendered safe by pasteurization. When we remember that approximately fifty per cent of our population reside in the small towns and rural communities and thus in the main are without the protection that pasteurized milk affords, the importance of this type of public health problem is self-evident.

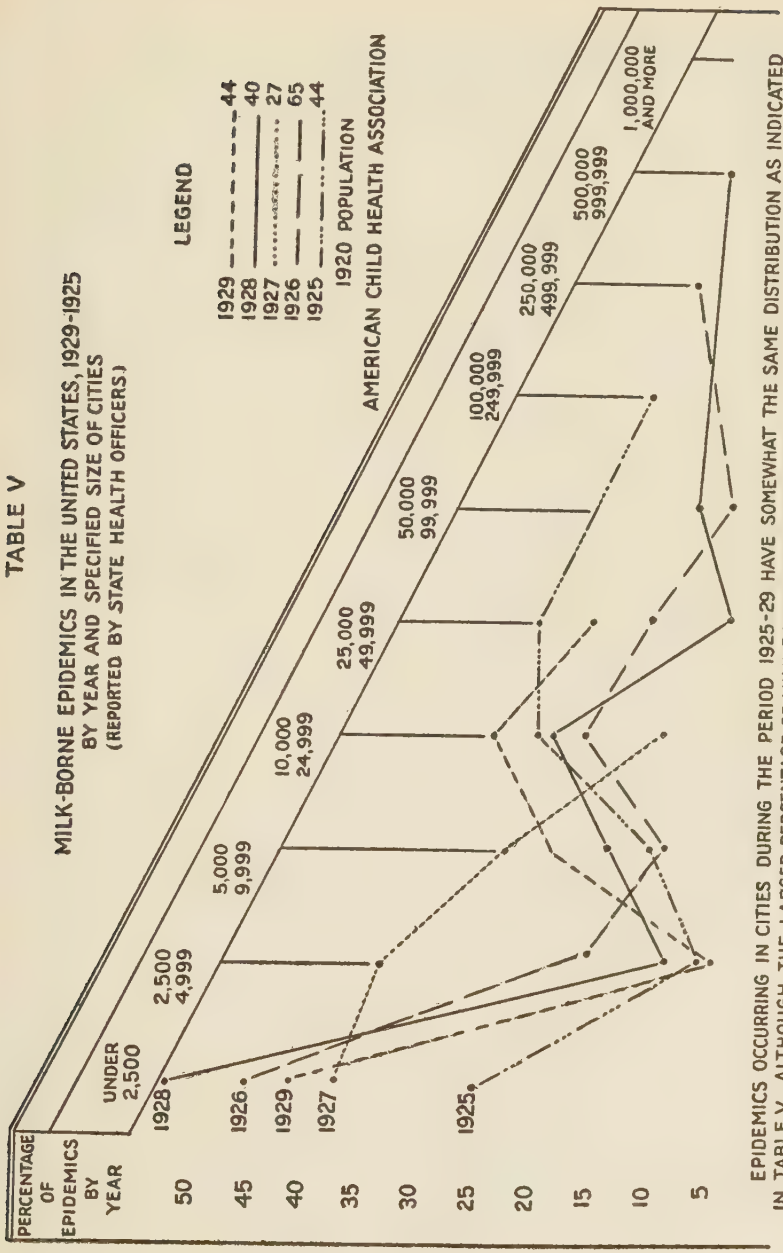
It seems reasonable to conclude that until such time as we may have efficient pasteurization of milk that frequent outbreaks of milk-borne epidemics may be expected.

TABLE IV

MILK-BORNE EPIDEMICS IN THE UNITED STATES, 1924-1920
BY YEAR AND SPECIFIED SIZE OF CITIES
(REPORTED BY STATE HEALTH OFFICERS)



OF THE 121 EPIDEMICS OCCURRING FROM 1920-24 INCLUSIVE, TABLE IV, AS REPORTED BY STATE HEALTH OFFICERS, THE MAJOR PERCENTAGE DISTRIBUTION OF THE EPIDEMICS OCCURRED IN CITIES OF FROM 10,000 TO 25,000 POPULATION AND IN THE SMALLER COMMUNITIES INCLUDING THE RURAL SECTIONS AND TOWNS UNDER 2,500 POPULATION.



EPIDEMICS OCCURRING IN CITIES DURING THE PERIOD 1925-29 HAVE SOMEWHAT THE SAME DISTRIBUTION AS INDICATED IN TABLE V, ALTHOUGH THE LARGER PERCENTAGE OF MILK-BORNE DISEASES OCCURRED IN THE RURAL DISTRICTS AND THE TOWNS UNDER 2,500

TABLE VI

PERCENTAGES OF MILK-BORNE EPIDEMICS, CASES AND DEATHS IN THE UNITED STATES IN THE LAST DECADE, (1929-20) BY SPECIFIED SIZES OF CITIES

(REPORTED BY STATE HEALTH OFFICERS)
1920 POPULATION

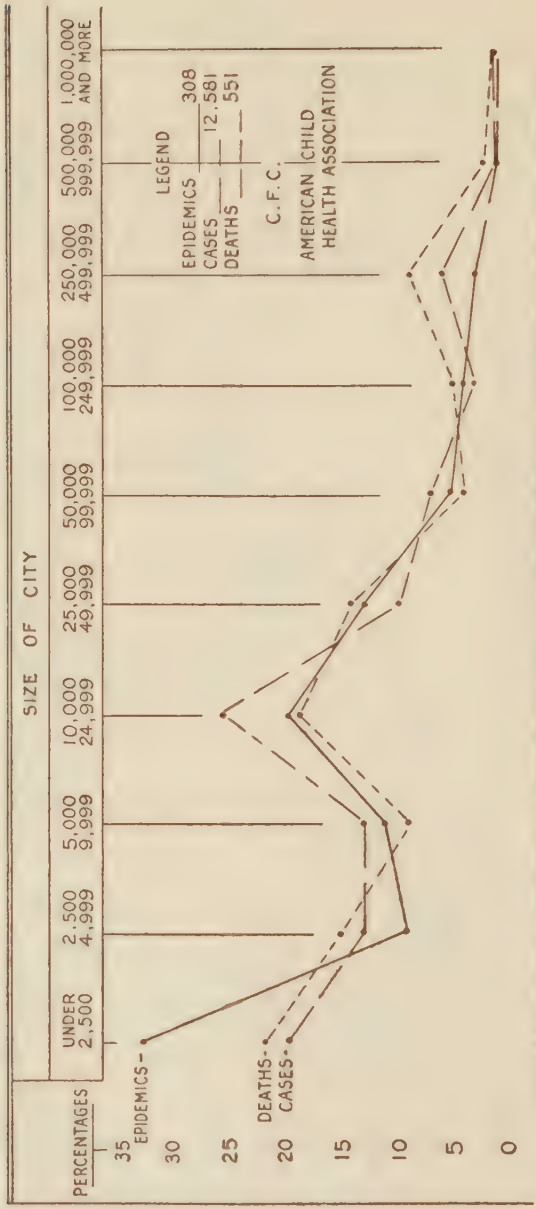


TABLE VI SHOWS A PERCENTAGE DISTRIBUTION OF MILK-BORNE EPIDEMICS DURING THE LAST DECADE, 1920-29 INCLUSIVE, AS EXPRESSED IN CASES AND DEATHS DISTRIBUTED BY POPULATION OF COMMUNITIES AFFECTED. WE SEE HERE THE SAME GENERAL TREND OF THE HIGHER PERCENTAGE OF CASES AND DEATHS FROM MILK-BORNE EPIDEMICS OCCURRING IN CITIES BETWEEN 5,000 AND 25,000 POPULATION AND IN TOWNS OF UNDER 2,500, INCLUDING THE RURAL COMMUNITIES.

A search of literature reveals an occasional epidemic of disease caused from dairy products other than milk. Thus there have been recorded five ice-cream epidemics, three of which were typhoid fever outbreaks, one of scarlet fever and one of septic sore throat. There have been three outbreaks due to infective cheese, one epidemic of typhoid fever, one of streptococcic infection and one of gastro-intestinal disease. There has been but one outbreak traced to cream, that being a typhoid fever epidemic.

The same precautions in relation to the protection, manufacture and distribution of dairy products should be carried out as are necessary in the production and distribution of milk, if we are to be assured of a constantly safe supply of these wholesome dairy products.

A classic illustration, and perhaps the most striking example of the immediate effect in the reduction of diarrheal diseases of infants by the pasteurization of the milk is that which occurred on Randall's Island, New York, in a children's institution, where a mortality of 44.36 was promptly reduced to 19.80 after all the milk was pasteurized, no other hygienic measures being put into operation.

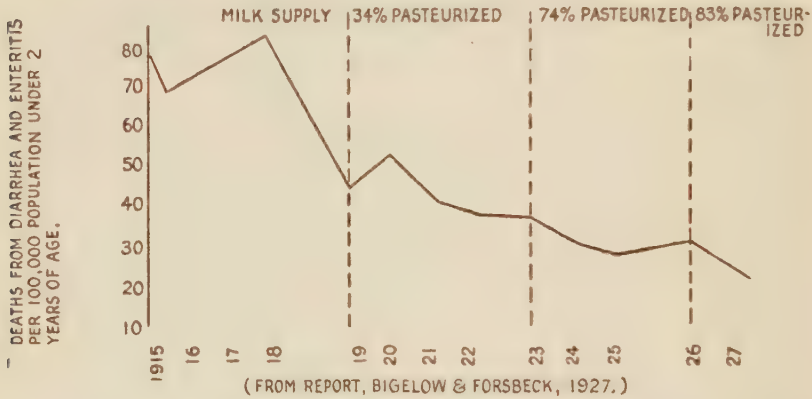
Milk Supervision and Pasteurization

That effective milk supervision and control does greatly reduce that portion of infant mortality due to diarrhea and enteritis is shown by experience in a number of American cities. An excellent example of the apparent correlation between the reduction of fatalities from diarrhea and enteritis and the increase of pasteurization of milk supplies in communities of 10,000 or more is the experience in Massachusetts, which is graphically shown in Table IV.

It has long been understood, and is being increasingly emphasized, that milk of an insanitary quality or a high bacterial content cannot be made into a high grade, wholesome milk through the process of pasteurization. Park and others have shown that milk of a high bacterial content, even when pasteurized, is not a wholesome food to use for infant feeding. Pasteurization, therefore, is not a substitute for the clean and sanitary production of milk.

However, inasmuch as large groups of our people living in the smaller cities, towns and rural communities cannot, under present conditions, avail themselves of a wholesome pasteurized

milk supply, it becomes all the more necessary that Effective Sanitary Control be instituted in these communities for the production and distribution of a clean and safe milk supply. Perhaps the most promising movement in this direction is the growing demand for the installation and maintenance of full-time County or District Health Units, through which means a constant and continuing supervision of milk supplies may be secured. In the absence of local health supervision, the State must assume the responsibility of local milk control.



(FROM REPORT, BIGELOW & FORSBECK, 1927.)

In some communities milk producers and distrubtors, recognizing the importance of clean and safe milk, have joined with sympathetic and helpful officials in cooperative effort in the providing of a clean and wholesome supply. Such efforts are commendable and should be fostered wherever possible. The milk control work in California is an excellent example of such effective teamwork, which has resulted in increased consumption and increased profits for the producers.

Fortunately, purity and cleanliness of milk are the chief requisites in flavor and general wholesomeness, so that the real interests of both milk producers and distributors and the public control officials run parallel and thus afford a common ground upon which effective milk control may be found and instituted.

Human Diseases Through Milk

The spread of human diseases through the medium of milk is of much greater epidemiological significance than the direct

transmission of infections from cattle, and their prevention calls for certain precautions other than those herewith suggested.

TUBERCULOSIS

In 1898, Theobald Smith published the results of his extensive studies on tubercle bacilli from different species—seven from human sputum, five from cattle, and one each from a cat, horse, and pig. His conclusions were that there exists "a distinctively human, or sputum and bovine variety of tubercle bacilli." He describes with great clearness the differences that exist between these two types, in their morphology, cultural characters and virulence, especially for rabbits and calves.

With the difference between the two types of tubercle bacilli clearly defined, it was possible to determine with reasonable certainty whether the bacilli in a tuberculous tissue belonged to the human or to the bovine strain. Extensive researches on the types of tubercle bacilli were undertaken especially in the Gesundheitsamp in Berlin, by the British Commission on tuberculosis, human and bovine, and in the Research Laboratory of the New York City Board of Health. In addition to these major investigations many specimens have been studied by different workers. The table on page xiv, compiled by Park and Krumwidie from data obtained at the time bovine tuberculosis was at its peak in this country, gives the findings in a total of 1,220 examinations.

The Commissions and Laboratory mentioned report a total of 121 cases of tuberculous meningitis that have been studied. Twenty-one were in persons from five to sixteen years of age, from which the human type was isolated in 19 and the bovine in 2. The remaining 100 were in children under five years of age, of which 80 contained the human and 20 the bovine bacilli.

Cobbett collected the reports of the examinations of 57 cases of abdominal tuberculosis, of which 10 were adults. From adult cases the human type was recovered in 8, and both forms were present in 2. In the 47 cases under sixteen years of age, 19 were due apparently to the human type and 28 to the bovine.

The examination of 49 cervical glands that had been removed surgically from adults showed that 40 contained the human and 9 the bovine organism. The study of 115 such cases in children between the ages of five and sixteen, showed 52 to contain the human and 63 the bovine, and in 85 cases in children under five years of age, 17 showed the human and 68 the bovine type.

TYPES OF TUBERCLE BACILLI IN 1,220 HUMAN INFECTIONS

Diagnosis	Adults of More than 16 Years		Children from 5 to 6 Years		Children Younger than 5 Years	
	Human	Bovine	Human	Bovine	Human	Bovine
Pulmonary tuberculosis	644	1	11	.....	23	1
Glandular tuberculosis (axillary or inguinal)	2	.....	4	.....	2	
Cervical gland tuberculosis	27	1	36	21	15	21
Abdominal tuberculosis	14	4	8	7	9	13
Generalized tuberculosis (alimentary origin)	6	1	2	3	13	12
Generalized tuberculosis (with meningitis, alimentary origin)	29	.....	5	1	46	13
Generalized tuberculosis (with meningitis)	5	.....	7	.....	52	1
Tuberculous meningitis	1	.....	3	.....	27	4
Bone and joint tuberculosis	27	1	38	3	26	
Genito-urinary tuberculosis	17	1	2			
Cutaneous tuberculosis	3	.....	1	.....	1	
Other tuberculoses						
Of the tonsils	.....	.....	.....	1		
Of the mouth and glands of the neck	.....	1				
Of the maxillary sinus	2	.....	.....	.....	1	
Latent tuberculosis						
Total	777	10	117	36	215	65

According to Cobbett the prevalence of the bovine type in cervical glands that had been removed surgically from persons sixteen years of age and younger, varied considerably in different countries. In Scotland it was 87 per cent, in the United States 53 per cent, in England 50 per cent, and in Germany 35 per cent.

The probable source of infection is through raw milk from cows affected with tuberculous udders. Smith concluded that "bovine tuberculosis may be transmitted to children when the body is overpowered by large numbers of bacilli, as in udder tuberculosis or when certain unknown favorable conditions exist."

In the United States, the control of bovine tuberculosis is solving the problem of human infection with the bovine strains. In 1917, the Federal Government in cooperation with the States

undertook to eradicate bovine tuberculosis by the accredited herd plan. Already large areas have been freed of this disease. There are 976 modified accredited counties in the United States. There are 2,435,000 herds that contain 20,983,000 animals that are once-tested-free. There are over 27,000,000 cattle now under official supervision and the work is progressing rapidly. In the month of June there were 986,607 cattle tested. Nowhere have Veterinarians undertaken a more comprehensive, sanitary problem than in the elimination of tuberculosis from the cattle of this country. While this is being done, health officials are insisting on pasteurization which destroys tubercle bacilli, if they are present in the milk.

UNDULANT FEVER

In recent years undulant fever has been recognized as one of the diseases of cattle communicable to man through milk.

Undulant fever is caused by *Brucella abortus,* which is responsible for infectious abortion in cattle and swine. Bang and Stribolt of Copenhagen described this organism in 1897, but its infectiousness for man was not recognized until recently. Like tuberculosis, the specific organisms of infectious abortion, found in different species, have been differentiated into three distinct races or species, namely: *Brucella melitensis,* the cause of Malta fever in man; *Brucella abortus,* the cause of infectious abortion in cattle; and which produces a disease in susceptible people similar to Malta fever; and *Brucella suis,* the strain that has been isolated from swine.

The first case of human infection with *Brucella abortus* reported in America was described by Keofer in 1924. In 1926, Carpenter and Merriam reported two cases in Ithaca. The same year Moore and Carpenter called attention to four others. By aid of the Hecksher Fund, Carpenter, Parshall, and Baker were able to study this disease and to test the pathogenesis of the specific organisms isolated from man on guinea pigs and pregnant heifers. They reported 18 cases in man. In addition they found *Brucella abortus* in 8 of 55 pairs of tonsils examined that had been removed by local surgeons.

The results of studies made at the New York State Veterinary College showed that in a period of two years twenty-six cases of undulant fever had been recognized in a population of 337,000, a highly developed dairy district. There were no fatalities and

but very few of the cases were seriously ill. All of them were in people who stated that they drank freely of raw milk. None of them were butchers or engaged in handling meat or in raising swine. In a number of instances the milk came from herds where Bang abortion disease was found to be prevalent. In one instance the "family cow" was the only one in the herd whose milk was infectious. The examination of the samples of market milk showed that approximately twenty per cent of the raw market milk sold in this territory contained *Brucella abortus* in sufficient numbers to produce lesions in guinea pigs. It was found also that from 20 to 35 per cent of the dairy cows that gave a positive agglutination test were eliminating the organism in their milk. However, of the cows that had actually aborted, 40 to 50 per cent harbored *Brucella abortus* in their udders.

Hardy collected the cases of undulant fever that had been reported in the United States up to July 1929. He found a total of 1296 cases distributed in 43 states. Of these less than 3 per cent were in children under ten years of age. He did not include those cases reported from Texas, Arizona and New Mexico which are likely to be of goat origin. He records 223 cases from Iowa, of which 116, or 52.3 per cent were in country people and 23, or 10.4 per cent were urban residents employed in packing houses. There were 30 cases, or 13.4 per cent who lived in cities but who were not engaged in handling animals or meat and 53, or 23.9 per cent who lived in towns of less than 5,000 population.

There is a voluminous literature, including reports of cases, setting forth the supposed source of infection of this newly recognized disease in man. Undoubtedly there are many cases not reported, and it is possible that young children may be affected more often than it is now supposed. However, the data available suggests that undulant fever is not of so great an epidemiological significance as certain writers have implied. Smith has pointed out that the bovine type of *Brucella abortus* is so slightly invasive for man that it fails to produce appreciable disturbances but that as a by-effect it may immunize toward the more virulent types of bovine and caprine origin. He also shows that the porcine type may become seeded in the udder of the cow, just as hemolytic and scarlatenal streptococci, under certain unknown conditions, may gain a foothold in it, from which they are ingested with the milk.

The practical question with which this Conference is concerned is, how can human infection from the strain or strains of Brucella

that come to men through milk be prevented? Undoubtedly infections occur through the handling or working with infected animals and animal tissues, but these are separate from milk-borne infections. It is significant to note that the majority of cases recorded were in country people where pasteurization of milk is rare, or in those who lived in cities but were employed in packing houses.

Fortunately, the control of the milk-borne cases of undulant fever is not difficult. It involves the proper pasteurization of all market milk and that consumed on the farms, until the time when dairymen have eradicated Bang abortion disease from their animals. Well-formulated and workable plans are advocated by competent veterinarians and also by a few State live stock sanitary boards to aid cattle owners in their efforts to eliminate this infection from their herds. *Sound animals only* is becoming rapidly the slogan of milk producers.

SEPTIC SORE THROAT

In 1875 septic sore throat due to infected milk was recognized in South Kensington, England. In May 1911, an outbreak occurred in Boston, Mass. Winslow made a careful epidemiological study of the 1,400 cases involved and found that 70 per cent were supplied with milk from one dairy. Smith isolated a streptococcus from the tissues of four fatal cases. The relation of streptococci to udder infection was suspected as early as 1884 by Nocard and Mollereau. The epidemics of septic sore throat traced to milk infection that have been reported since 1910 are numerous and the total number of cases extend into the thousands with many deaths. The one in Chicago in 1911 reported by Capp and Miller is estimated to have numbered 10,000 cases and the one in Lee, Massachusetts in 1928 involved 1,000 cases with 40 deaths. The United States Public Health Service reports from 1918 to 1926 inclusive, 16 epidemics with 3,179 cases and 34 fatalities. In 1929 there were reported in the United States 7 epidemics with 739 cases and 13 deaths, and in Canada 4 epidemics with 37 cases and 3 deaths. Measured by the number of fatalities, septic sore throat is the most serious of the milk-borne diseases traced to udder infection. However, it occurs among adults more than in young children. In the Lee epidemic only twenty per cent of the cases were in persons under fifteen years of age.

Extensive studies have been made to differentiate the form of

mastitis that is responsible for this affection. More recent studies have shown that the streptococci found in mastitis belong to at least two distinct groups or species, namely, *Streptococcus epidemicus* that causes septic sore throat in humans, and *Streptococcus mastiditis,* the cause of certain udder troubles. *Streptococcus epidemicus* is believed by many bacteriologists to be of human origin. The explanation is, that it finds its way into the milk ducts of the udder from infected persons, multiplies in the milk in the udder, and escapes with it. This streptococcus may be present in large numbers before lesions in the udder appear and before there are symptoms to arouse suspicion on the part of the milker.

The control of this form of septic sore throat rests in efficient pasteurization. As the streptococcus causing it may not produce tissue changes in the udder of the infected cow, it cannot be excluded always by physical examination.

SCARLET FEVER

While the causative agent in milk-borne scarlet fever is considered generally as coming from a case of human infection, transported in milk, there is evidence that *Streptococcus scarlatinae* may become located in the udder of cows where it multiplies and causes a definite mastitis. In such cases the diseased udder becomes a source of supply for the distribution of the specific streptococcus. Jones and Little were the first to furnish bacteriological evidence that cows could be infected with the scarlet fever organism. They reported a case where the milk of an infected udder contained 345 million streptococci per cubic centimeter. The streptococcus answered all the requirements for that of scarlet fever.

Jones has pointed out that milk, under ordinary conditions, inhibits the growth of scarlet fever streptococci and that the usual opinion that milk-borne epidemics of this disease are due to a human case or carrier on the farm, or in the dairy, may be erroneous, as the cause may have its immediate origin in an infected udder. The present knowledge indicates that dairy cattle should be protected against infection from human carriers. In addition, the milk should be pasteurized.

MASTITIS

In recent years a number of outbreaks of illness, largely among children, and usually of short duration, have been reported following the consumption of milk from cows suffering with mastitis and from which streptococci were isolated. The reports by Massey in the London Lancet and by Laidlaw in a New York State Journal of Medicine, suggest that streptococci in cases of mastitis may be injurious. Acting on this supposition, veterinary inspection of dairies is being increased and more attention is being given to pasteurization.

MISCELLANEOUS DISTURBANCES

A disease of cattle known as "trembles" has been reported from certain restricted areas in the United States. The milk of affected cows transmits the disease to man.

In case of catarrhal and parenchymatous mastitis, the pus present in the milk may be harmful, especially to young children. In cases of disease in which cows have a high temperature, the milk may cause unpleasant symptoms. Milk from cows suffering from indigestion may possess properties of an irritating nature.

The greatest factor in the protection of milk against contamination of all kinds is the human equation. Knowledge and regulations are too often neglected both by milk producers and by consumers. Milk, to remain wholesome, must be cared for properly after it leaves the udder. This involves an intelligent understanding of its nature and how to protect it. Improvement depends on the application of sanitary principles. The course for obtaining an almost perfect milk supply in this country is blazed unmistakably and in the main the people are following the trail.

CONCLUSION

From the data gathered from a large number of reports and results of special researches on the transmission of disease from cattle to man through milk; the intensive work of the Federal and State Governments to eradicate bovine tuberculosis in this country; the active interest that is being taken by many dairymen and a few States to eliminate Bang abortion disease; the thorough physical examination of dairy cows by competent veterinarians and the exclusion of diseased individuals required by the large

milk companies and many municipalities; and the demands of health officials in all large and most smaller cities that, in addition to the precautions in its production, market milk should be pasteurized; the following conclusion may be drawn:

That the diseases mentioned in this report would, under solely natural conditions, become a serious menace to human health; but that the measures imposed by municipalities generally, and exacted by all responsible milk distributors, to safeguard it against all possible contamination and infections, eliminate, for the greater part, the danger otherwise imminent, except for residents of rural districts and smaller towns where the preventive measures, especially pasteurization, are as yet, not observed as fully as they are in the larger centers. The result of these united efforts is to give the American public a progressively cleaner and safer market milk.

RECOMMENDATIONS

1. That pasteurization be required wherever practicable.
2. That pasteurization is not intended to take the place of the sanitary production of clean and wholesome milk, but rather to provide the final factor of safety from milk-borne diseases.
3. That cooperative effort between producers, control and educational officials, give promise of the best and most lasting results.
4. That in the absence of local milk control the State must assume this responsibility.

PUBLIC HEALTH SUPERVISION OF MILK

The Sub-Committee on the Public Health Supervision of Milk has attempted to formulate answers to the following questions:

1. What are the essential elements of the public health supervision of milk supplies?
2. What fundamental items should be included in the laws or regulations relating to the public health supervision of milk supplies, and what agencies should enforce them?
3. How should the results of the enforcement of the laws or regulations for the public health supervision of milk supplies be evaluated?
4. What is the present status of the public health supervision of milk supplies in the United States?
5. What recommendations should the White House Conference make with reference to the future improvement of the public health supervision of milk supplies in the United States?

Essential Elements of the Public Health Supervision of Milk Supplies

Since 40 or more milk-borne outbreaks of disease are reported annually in the United States with a resultant, unnecessary toll of death and disease, all official public health agencies should be empowered to apply all essential public health measures for their prevention. These should include: (a) inspection of farms and plants; (b) supervision of the physical examination and testing of cows; (c) laboratory examination of milk; (d) physical examination of workers and residents at farms and plants, including laboratory examination of body discharges; and (e) pasteurization control.

INSPECTION

Inspection is designed to disclose whether the necessary public health precautions have been applied at the farm and plant, and therefore whether the degree of cleanliness and safety of the milk supply which these precautions provide, has been assured. To be most effective inspections should be made at irregular but frequent intervals by competent inspectors.

However, sanitary inspection cannot protect against infectious cows or infectious employees, nor can it insure the maintenance of proper methods between inspections. Therefore, this milk control measure cannot alone be depended upon to insure a clean, safe milk supply.

PHYSICAL EXAMINATION AND TESTING OF COWS

Studies of the relation of bovine disease to the public health have emphasized the importance of periodic physical examination and testing of cows for certain diseases transmissible by cows through milk to man. Much can be done by means of this measure to reduce disease transmission through milk, although the examinations and tests are not infallible and cannot be made at sufficiently frequent intervals to insure the absence of infectious cows from the herds at all times. Therefore, this measure should not alone be relied upon to insure a milk supply free of diseases transmissible from cattle to man.

LABORATORY EXAMINATION OF MILK

Laboratory examination of milk provides a valuable index with respect to cleanliness and safety and is deserving of both more

intensive and more extensive use. Such examinations provide useful supplementary information. However, no known practicable laboratory examination of milk supplies will dependably disclose the existence of infectious cows, infectious employees, unsanitary privies, unsafe water supplies, or fly contamination. Therefore, laboratory examination of milk should not alone be relied upon to insure a clean, safe milk supply.

PHYSICAL EXAMINATION OF WORKERS AND RESIDENTS AT FARMS AND PLANTS

Studies of the epidemiology of milk-borne outbreaks of disease have emphasized the importance of making periodic physical examinations of workers and residents at farms and plants, including laboratory examination of body discharges. Many epidemics of typhoid fever, for example, can be prevented by this measure. However, since such examinations are not infallible and cannot be made at sufficiently frequent intervals to insure the absence of infectious persons from farms and plants at all times, this measure, while useful, should not alone be relied upon to prevent the transfer of infection from such persons to the milk.

PASTEURIZATION CONTROL

Pasteurization, properly done, renders harmless or destroys all disease-producing organisms known to be transmitted through milk to man, and does not significantly impair or alter the flavor and food value of milk.

Because of the fact that the public health measures previously discussed are not of themselves completely protective, either singly or in combination, pasteurization control may be regarded as a necessary final public health safeguard for all milk supplies.

However, even pasteurization is subject to the fallibility of its operators, and while all health officers should persistently emphasize the fact that all milk may advantageously be pasteurized before it is consumed, either in a supervised commercial plant or at home, this measure should not be considered as rendering unnecessary any of the previously discussed measures. Pasteurization should go hand in hand with all other essential public health measures in order to insure a clean, safe milk supply.

What Fundamental Items Should be Included in the Laws or Regulations Relating to the Public Health Supervision of Milk Supplies? And What Agencies Should Enforce Them?

The first part of this question will be discussed under three subdivisions, namely, municipal, state, and federal legislation.

MUNICIPAL MILK ORDINANCES OR REGULATIONS

Municipal milk ordinances should be definite, clear, and brief. They should contain the following elements:

1. Definitions of milk, milk products and other terms used in the ordinance or regulation.
2. Prohibition of the sale of adulterated milk and milk products.
3. Provision for permits, and for permit revocation.
4. Requirements governing the labeling of containers.
5. Requirements relating to the frequency of inspection and reinspection, and the posting of inspection reports.
6. Requirements relating to the frequency of taking milk samples, and to the laboratory examination thereof.
7. Specifications for Certified Milk, Grade "A" Raw Milk, and Grade "A" Pasteurized Milk.
8. One of two alternative devices for punishing violations of grade requirements, namely:

   (a) For cities which wish to maintain high grade supplies by the de-grading method this section should provide that when a given milk supply is found to violate the specifications under which it is labeled, it shall be labeled with one of a number of lower grade letters, depending upon the nature of the violation. In this case the specifications for the various lower grade labels should be added to Regulation 7.

   (b) For cities which wish to maintain high grade supplies by the permit-revocation method, this section should provide that when a given milk supply is found to violate the specifications under which it is labeled it shall be barred from the market by revocation of permit. In this form of ordinance the lower grade specifications need not be included in Regulation 7.
9. The usual sections relating to penalties; repeal of conflicting, prior legislation; date of effect; and unconstitutionality.

STATE MILK LAWS OR REGULATIONS

It is generally conceded that centralized and standardized administration tends to lead to greater efficiency and to a lower per capita cost, but may also lead to an undesirable expansion of bureaucracy. On the other hand, decentralized administration, if undirected, tends to lead to inconsistency and inefficiency of method. The sub-committee believes that so far as possible every municipality should regulate its own milk supplies, but that all municipalities should attempt to secure the advantages of centralized administration, without incurring its disadvantages, through a voluntary program of standardization of methods.

The opinion is held in some States, however, that milk supervision should be placed on a state law basis. For States which prefer this plan the sub-committee recommends that the state law contain essentially the elements previously enumerated for municipal milk ordinances. The law may be enforced either directly by state personnel or may make enforcement by all municipalities in a specified classification mandatory.

States which desire to promote a voluntary uniformity of municipal supervision through state legislation may pass essentially the same regulations as above except that provision is made that they shall be in force only in the localities in which they are approved by the city or county health department.

Finally many States, probably the majority for many years, will wish to promote voluntary uniformity entirely without the agency of state legislation. For these the best plan is for the State to promulgate an advisory standard municipal milk ordinance and to encourage its local adoption.

Your sub-committee believes that there is as yet insufficient evidence to justify a conclusion as to the relative excellence of these methods.

FEDERAL LEGISLATION RELATIVE TO THE PUBLIC HEALTH ASPECTS OF MILK AND MILK PRODUCTS

The Federal Government is now authorized by Congress, and should continue to be so authorized:

1. To conduct research and make investigations and surveys on all phases of the public health supervision of milk and milk products, and to publish the results thereof.
2. To enforce legislation relating to the interstate aspects of the public health supervision of milk and milk products.

3. To give advice and cooperative assistance to state and local public health authorities with reference to the public health aspects of milk and milk products.

What Agencies Should Enforce the Laws or Regulations Relating to the Public Health Supervision of Milk Supplies?

The supervision of milk, cream and other dairy products is of vital public health concern and economic importance, and should receive the coordinated attention of all state and local agencies, including public health authorities, agricultural departments, agricultural, educational and extension organizations within the State or community. The sub-committee recommends that inasmuch as the laws and regulations in question deal only with measures which are designed primarily to protect the public health, they should, where practicable, be made the function of health authorities, local, state and federal. The public health supervision of municipal milk supplies should obviously be the function of governmental departments primarily dedicated to the public health point of view and technically trained in the recognition of all public health aspects of the problem.

How Should the Results of the Enforcement of the Laws or Regulations for the Public Health Supervision of Milk Supplies Be Evaluated?

Periodic ratings of the public health status of milk supplies are necessary in order to insure a constantly maintained alertness and efficiency on the part of the responsible public health officials, and in order to provide a measure of progress from year to year. The sub-committee recommends that all municipalities should be surveyed and rated as frequently as practicable.

All such ratings should be based upon a common standard in order that they may be comparable. The Grade "A" Raw Milk and Grade "A" Pasteurized Milk requirements of the Standard Milk Ordinance may conveniently be used as such a common standard. These grades are the most widely used milk standards in existence today. They represent standards of quality which, if satisfied, would make the raw milk as safe as raw milk can practicably be made, and would make the pasteurized milk as safe as any milk can be made. Following is a discussion of a method of determining municipal, state and federal ratings.

DETERMINATION OF MUNICIPAL MILK SANITATION RATINGS

A proper milk sanitation rating is one which measures the percentage extent to which all practicable public health precautions have been applied. Such a rating can therefore be obtained by determining the percentages of the milk supply complying with each of those precautions, and then finding the weighted average of these percentages. The weighting should be done on the basis of the relative importance of the various precautions. Such a system of weights has been developed by the Public Health Service in connection with its survey methods.

In order to obtain a comprehensive index it is advisable to compute two specific ratings, namely, the rating of the retail raw milk and the rating of the pasteurized milk. These two ratings together with the percentage of milk pasteurized will give a valuable estimate of the protection enjoyed by the milk consumer.

DETERMINATION OF STATE AND NATIONAL RATINGS

State ratings can be computed by determining the average of the municipal ratings, weighted on a gallonage basis. National ratings can be computed by determining the average of the state ratings, weighted on a gallonage basis, or by determining the average of the ratings of a sufficiently large group of representative cities, weighted on a gallonage basis.

RATING OF ENFORCEMENT METHODS

In addition to the above ratings of the results of enforcement effort, the sub-committee further believes that the characteristics of the effort itself should be rated in order to make apparent how effort and result are related, and what specific defect in effort had led to any given, low "Result Rating."

The rating of effort may be accomplished by establishing a schedule of enforcement measures, such as inspection, sampling, etc., and estimating on a percentage basis the degree of completeness with which the health officer has applied each measure. The average of these percentages, weighted on a relative importance basis, will yield a useful effort rating.

What is the Present Status of the Public Health Supervision of Milk Supplies in the United States?

This question can be answered only by applying some standard yard stick, such as a standard schedule of items of sanitation.

The most widely used schedule of public health requirements for milk control in use in the United States today is that embodied in the Standard Milk Ordinance. Therefore, the sub-committee has studied rating surveys made on that basis by the Public Health Service during the past several years.

These surveys include in all 430 American cities with a total population of 13,290,669. They are located in 21 states. Of the 430 cities 247 had passed the Standard Milk Ordinance from a few months to seven years prior to the date of survey.

The following table gives the results of the surveys, computed on the basis of the evaluation method described in the immediately preceding chapter of this report.

It should be noted that the figures in the tables are subject to minor revision after the Public Health Service has completed its surveys of all States. Any necessary revisions will be included in a supplementary report.

Inasmuch as the rating is based upon the items of sanitation required for Grade "A" Raw and Grade "A" Pasteurized Milk in the Standard Milk Ordinance the following table gives separately the figures for Standard Ordinance and Non-Standard Ordinance cities:

Average Status of the Public Health Supervision of Milk Supplies in American Municipalities (1929–1930)

	Cities Enforcing Provisions of Standard Ordinance	Cities Enforcing Other Standards
Total Number of Cities Surveyed	247	183
Total Population of Cities Surveyed	4,472,236	8,818,433
Total Number of States in which Cities Located	14	11
Total Daily Milk Sales Represented in Survey (gals)	330,673	981,108
Total Number Retail Raw Milk Dairies Surveyed	3,002	2,409
Total Number Pasteurization Plant Producers Surveyed	2,494	5,003
Total Number Pasteurization Plants Surveyed	237	960
Average Percentage of Milk Pasteurized	50	90
Average Percentage Rating of Raw Milk	90	65
Average Percentage Rating of Pasteurized Milk	87	60

From the above table it is evident that the raw milk sold in

cities enforcing the standard ordinance averages 90 per cent compliance with the Grade "A" Raw Milk requirements, and that the Pasteurized Milk sold averages 87 per cent compliance with the Grade "A" Pasteurized Milk requirements; compared with compliance figures of 65 per cent and 60 per cent respectively in cities enforcing other ordinances. Whenever the milk supply is improved in quality consumption invariably increases.

The difference in the percentage of milk pasteurized in these two groups represents a regional difference and not a difference in the two groups of milk regulation. This is demonstrated by the fact that the quantity of pasteurized milk in the cities enforcing this standard milk ordinance has doubled within an average period of approximately three years.

The higher ratings shown by cities enforcing the standard ordinance should not be taken as implying that no other type of ordinance will yield as high ratings. In fact, it is undoubtedly true that many cities enforcing other types of ordinances have produced excellent milk supplies. The above figures represent averages only for the areas surveyed.

In addition to the above figures the sub-committee has considered it advisable to present an analysis of the survey results by size of city. These are given in the tables on the following page, from which these conclusions are noted:

(a) Retail raw milk tends to improve in quality as the size of the city increases.

(b) The quality of pasteurized milk shows no consistent trend, but there is a decided improvement in pasteurized milk when the 100,000 population group is reached.

(c) The percentage of milk pasteurized increases with size of city.

(d) The average quality ratings for both raw and pasteurized milk are constantly higher for cities enforcing the standard ordinance than for cities of the group studied, enforcing other standards, throughout the range of population groups.

Average Status of the Public Health Control of Milk Supplies in American Municipalities by Size of City (1929–1930)

	Cities Enforcing Provisions of the Standard Ordinance			
	Under 10,000	10,000 to 50,000	50,000 to 100,000	100,000 and Over
Total Number of Cities Surveyed	139	85	17	6
Total Population of Cities Surveyed	592,071	1,592,756	1,105,142	1,182,267
Total Number of States in which Cities Located	11	13	9	2
Total Daily Milk Sales (gallons)	35,637	109,745	83,534	101,757
Average Percentage of Milk Pasteurized	19	42	46	73
Average Rating of Raw Milk	88	89	90	95
Average Rating of Pasteurized Milk	82	82	81	92

	Cities Enforcing Other Ordinances			
	Under 10,000	10,000 to 50,000	50,000 to 100,000	100,000 and Over
Total Number of Cities Surveyed	87	68	9	19
Total Population of Cities Surveyed	453,402	1,529,680	645,397	6,189,954
Total Number of States in which Cities Located	11	11	5	7
Total Daily Milk Sales (gallons)	41,059	156,667	77,084	706,298
Average Percentage of Milk Pasteurized	48	73	91	96
Average Rating of Raw Milk	55	61	66	78
Average Rating of Pasteurized Milk	53	53	56	62

What Recommendations Should the White House Conference Make with Reference to the Future Improvement of the Public Health Supervision of Milk Supplies in the United States?

The sub-committee suggests that the following recommendations relative to the future improvement of the public health supervision of American municipal milk supplies be included with the general recommendations of the White House Conference.

1. Municipal milk control measures should include supervision of the inspection of farms and plants; physical examination and testing of cows; laboratory examination of milk; physical examination of workers and residents at farms and plants, including laboratory examination of body discharges; and pasteurization control.
2. All health authorities should persistently recommend to American milk consumers that pasteurization is an added factor of safety in a milk supply.
3. All laws or regulations for the public health supervision of milk supplies, whether local, State, or Federal, should incorporate insofar as practicable uniform requirements at least the equivalent of those now contained in the Standard Milk Ordinance recommended by the United States Public Health Service.
4. The Federal Government should continue its present functions of research, investigations, surveys, publications, and advisory assistance to local and state health authorities with reference to the public health aspects of milk and milk products.
5. The supervision of milk, cream and other dairy products is of vital public health concern and economic importance, and should receive the coordinated attention of all state and local agencies, including public health authorities, agricultural departments, agricultural, educational and extension organizations within the State or community. The sub-committee recommends that inasmuch as the laws and regulations in question deal only with measures which are designed primarily to protect the public health, they should, where practicable, be made the function of health authorities, local, state and federal. The public health supervision of municipal milk supplies should obviously be the function of governmental departments primarily dedicated to the public health point of view and technically trained in the recognition of all public health aspects of the problem.

6. The milk supplies of all municipalities should be surveyed and rated as frequently as practicable in accordance with the method previously described in this report.

Report of Sub-committee on the Nutritional Aspects of Milk

Milk is a fluid secreted by the mammary gland for the nourishment of the young. It is variable in composition, depending upon species, breed, age, period of lactation, intervals between emptying the gland, time of year, and diet. Analyses of individual samples are not trustworthy in furnishing evidence for the composition of all milks. Cow's milk contains more proteins and ash than does human milk. If fed to infants the former must be modified by dilution with water and addition of carbohydrate. The fat content may be regulated by selecting milk from different breeds of cows. The principal constituents of milk are protein (casein, lactalbumin, lactoglobulin), carbohydrate (lactose), fat, mineral salts, vitamins, pigments, enzymes, and traces of numerous other substances. Most investigations have been carried out with cow's milk.

Composition

Casein is the protein most easily separated in a state of relative purity from milk. It has been more studied than any other protein. There is much reason to believe that even the purest casein still contains impurities. Some evidence has been brought forward to indicate that it is of dual nature. It is doubtful whether pure casein has ever been prepared. Even the question of homogeneity of casein has been raised. No significant differences have been detected in the elementary composition of caseins from different milks. Highly delicate immunological reactions seem to show that casein from the milk of one species is the same as that from the milk of another.

That two samples of milk with the same composition may not be equally readily digested by infants is shown by common experience. Some have attributed this to the differences in the size of the fat globule, others to the state of division of the curd. Human milk is well tolerated by infants, yet it contains fat globules of all sizes ranging from the smallest to the largest found in cow's milk. This seems to argue against the validity of the fat globule size theory of the relation between the state of fat in a milk and its quality in infant feeding.

Toughness and coarseness of curd have often been mentioned as qualities affecting the digestibility of milk. Curd of cow's milk is precipitated to a varying extent by hydrochloric acid, depending upon the breed of the cow. The precipitated curd from certain breeds is coarser than that from others. Hill has shown that the curds of milk from individual cows vary in toughness. This applies to all breeds. Toughness of curd remains fairly constant throughout the lactation period. Curd is somewhat tougher in the early stages of lactation and becomes softer toward the end. Toughness is not influenced by the fat content and there is no good evidence that the feed of the cow exerts any effect. The curd property, which is an individual characteristic of the cow, is believed to be an inheritable character. Hill found that milk with curds of varying toughness are not tolerated equally well by infants. Experience seems to have shown that an infant fed soft curd milk may thrive, whereas fed tough curd milk it may have digestive disturbances.

Milk is an almost complete food. Its proteins are of high quality. This means that they furnish a mixture of amino-acids in favorable quantitative relations for transmission into body proteins during growth. Its value may be enhanced by the addition of the sulphur-containing amino-acid cystine.

The carbohydrate lactose contributes about 29 per cent of all calories coming from milk. The fat of milk is especially important in that it is one of the few food fats containing vitamin A. The ash of milk is especially rich in calcium. Since all cereals, meats, eggs, roots, tubers, and fruits are deficient in this element, milk is an important supplementary food for providing calcium. The absolute amount of calcium which the daily diet of an infant or child should contain has been the subject of a number of investigations, but the question has not been satisfactorily answered. All experimenters are agreed that the calcium of milk is easier of assimilation than is this element from vegetables. Since in the diet of the infant and young child the calcium is derived largely from milk, the calcium requirements of the child will determine in great measure the content of milk in its food. It is generally agreed that all growing children up to the age of 14 should consume a liberal amount of milk in their daily diet unless there are specific contra-indications. The absolute amount of calcium daily retained by children increases as the milk in the diet is increased up to approximately one quart a day.

The most striking deficiency of milk is iron. Infants and young animals restricted to milk or milk and iron-poor foods for a considerable period develop anemia. Studies on blood regeneration have demonstrated that iron cannot be utilized for hemoglobin formation unless accompanied by a small amount of copper, and milk has been shown to be deficient in this element. The nutritional anemias which have been studied in animals have not been investigated thoroughly in infants, so little can be said on this subject as respects human nutrition. The proportion of iron in the body is higher at birth than at any subsequent period. As the body grows in weight and size the proportion of iron decreases if the food is deficient in iron, as is often the case in improperly fed infants and young children.

Milk fat is a good source of vitamin A and contains a small amount of both D and E. The non-fat portion of milk appears to be somewhat deficient in vitamin B, the anti-neuritic principle, but to contain more of the anti-pellagra principle, vitamin G. Raw milk always contains some of the anti-scorbutic vitamin C. The studies of Macy have shown a pronounced deficiency of vitamin B in both human and cow's milks as to indicate the advisability of supplementing the diet of the infant at an early age with a source of this vitamin richer than milk. It is of great significance that the content of vitamin B in the milk can be markedly increased by including in the diet of a lactating mother foods rich in this principle.

Conditions Affecting Composition

The composition of milk may be varied by a number of conditions, among them the diet of the mother. Milk yield as well as composition may be so influenced. Over-feeding produces no change either in yield or composition of milk. Under-feeding produces significant changes, especially in an increase in the percentage of fat in the milk, but the yield tends to fall off. Raising the protein content of the food increases the quantity of milk produced. The quality as well as the quantity of protein of the food exerts complex effects upon milk composition. The inorganic constituents of milk remain fairly constant over relatively long periods even though the amounts of individual elements in the mother's diet vary within wide limits. Lactating animals remain for long periods in marked negative calcium-phosphorus balances while maintaining the normal milk yields. On diets deficient in

these elements the mother therefore sacrifices herself to maintain the composition of the milk constant for the preservation of her young. Changes in the vitamin content of the diet influence directly the content of these nutrients in the milk rather than the amount of milk. The vitamin content of the milk may be decreased by deficient diets more readily than can be the content of any other milk constituent.

Colostrum is the fluid secreted by the mammary gland during the early days of lactation, and differs from milk in the presence of certain cells known as colostrum bodies. It contains also a high content of globulin. These peculiarities in its composition have suggested that it has some special function in protecting the infant. Colostrum contains anti-bodies. The content of these parallels the amount of globulin. Certain species of young are susceptible to infectious diseases when colostrum is not given them, whereas the young fed from the breast immediately after birth remain free from such diseases. This has not been shown to apply to human subjects. In cattle and goats it appears especially that there is a transmission of immunity from mother to new-born young through the agency of colostrum, but the latter appears to play a negligible rôle in the transmission of immunity in rats, guinea pigs, and rabbits. The belief prevails that colostrum is not essential to the infant but scantiness of literature upon the subject and the contradictory findings of different workers make further investigations on this subject desirable.

This report includes in concise form the important facts concerning pasteurized milk, condensed milk, evaporated milk, powdered and dried milks, and malted milk, from the nutritional standpoint. There has been a growing tendency in recent years to pasteurize the milk supplies of cities. The percentage of milk pasteurized is far greater in large cities than in small cities, while villages and country districts still have generally only a raw milk supply. In 1924 the cities of over 500,000 population pasteurized 98.1 per cent of their milk, whereas cities of less than 10,000 pasteurized 33.6 per cent of their milk. Nearly all health authorities in this country are urging the pasteurization of market milk, since this prevents the dissemination of disease through this food.

The production of condensed milk has tended to decrease during recent years but in 1928, 3,311,357 cases of 48 cans were produced in the United States. Condensed milk contains about 42 per cent of sugar and 27.4 per cent of water. A number of in-

vestigators have shown that the vitamin content of condensed milk is practically the same as ordinary raw whole milk. This is evidently due to the fact that the evaporation is carried out in a vacuum so that there is little tendency to the oxidation of vitamin C.

Many investigations have established a low bacterial content of condensed milks, but they all contain some bacteria and molds. The development of these is inhibited by the high content of sugar and there is evidence that storage in sealed containers results in a decrease in the number of organisms which survive the canning process.

There has been a tendency in recent years away from the use of condensed milk in infant feeding, although many pediatricians still continue to use it in special cases. Its principal use is for household and culinary purposes, and in bread making and the manufacture of ice cream.

While the production of condensed milk has tended to decrease, the production of evaporated milk steadily increased between the years 1912 and 1918. Since 1918 the annual production has ranged between 19,000,000 and 25,000,000 cases of 48 cans. Evaporated milk has enjoyed increasing popularity in infant feeding in recent years.

In evaporated milk the anti-scorbutic vitamin is completely destroyed. Otherwise the fat value of evaporated milk is not sufficiently different from fresh milk to warrant an unfavorable comparison. It is practically sterile bacteriologically and of superior digestibility.

Powdered whole milk manufacture has increased from about 4,000,000 pounds in 1918 to nearly 11,000,000 pounds in 1926. Powdered skim milk during the same period increased from 26,000,000 pounds to nearly 92,000,000 pounds. The total production of all dried milk products in 1927 amounted to 196,396,000 pounds. Dried milk is used as a general substitute for liquid milk, infant feeding, household and culinary purposes, and industrially in bread making, the manufacture of candy, confectionery, and ice cream. To some extent it is used in stock feeding.

From the standpoint of nutritive properties it may be said that dried milks manufactured by either the spray or roller processes compare very favorably in all respects except the anti-scorbutic property with fresh milk.

RECOMMENDATIONS

Notwithstanding the immense amount of research which has been done upon milk, there still remains a number of very important questions which require further study. Among these are the following:

1. Studies on curd tension, which is a measure of the toughness of the curd formed by rennet coagulation, seem to have established a unique value of soft curd milks in infant feeding. This property applies also to older children and adults whose digestive powers are not vigorous. Further confirmation of the work thus far done in feeding soft curd milks to infants is highly desirable.
   It appears that the curd tension of milk can be greatly reduced, that is, the curd softened, by homogenization of milk, which is the breaking up of the fat globules into finer globules by mechanical means. It may thus prove feasible to render all milk soft curd milk and so improve its digestibility.
2. The vitamin content of milk, especially the water-soluble vitamins B and G, as determined by the biological assay, should be further studied. Such studies should be correlated with accurate determinations of the nutritive needs of the young for these vitamins.
3. A most important phase of nutritional research is that related to the biological values of proteins. Investigators have been much handicapped by their inability to secure considerable amounts of the 18 or more individual amino-acids into which proteins are digested. Very little progress has been made during the past twenty-five years in devising procedures for the isolation of amino-acids in pure form. Studies in this direction are highly desirable, and form a phase of research on the limiting factors in a chemical sense of milk as a food.
4. Further metabolism studies should be made on children to determine the optimum proportions of milk in the diet. The disagreement of experienced scientists and clinicians on this point emphasizes the need for information as to the proportions between milk and other foods suitable for inclusion in the diet of infants and children which afford the optimum supplementary relations. Such studies should include calcium assimilation, the effect of the ratio of calcium to phosphorus, the adequacy of vitamins B and G in the diet, and the influence of the proportion of milk to other foods on the biological value of the total protein content of the food combination studied.

5. Further studies are recommended on the nature of the colostrum cell and its significance in the nutrition of the new-born.
6. The demonstration of Macy and co-workers of the nutritive deficiencies of human milks when produced by women whose diet is not satisfactory, and that the inclusion of certain vitamin-rich foods tends markedly to improve the quality of the milk, emphasizes the importance of further fundamental studies of this character.
7. There is need of further standardization of apparatus, installation and operation of pasteurizing equipment in milk plants. A fundamental research on the several types of equipment for pasteurizing milk is recommended.
8. Since there are areas where milk could be economically produced but where no market is available near at hand, it appears economically desirable to increase the production of milk powders, evaporated milk and condensed milk. From a standpoint of economy it is also imperative that the surplus milk during the flush season be preserved by one or another of these processes. A careful research on the economic aspects of replacement of liquid pasteurized milk or certified milk by milk powder, condensed, and evaporated milks is of importance.
9. Further study is needed by pediatricians of the specific conditions in which different kinds of milks (certified, pasteurized market, boiled, condensed, and evaporated, milk powders, acidified milks, and so on) are indicated in infant feeding.
10. It is known that at least ten inorganic elements are essential in the diet for normal nutrition. There are a number of inorganic elements present in minute amounts in the various foods including milk. Their significance, if any, is still unknown. Investigations to demonstrate which of these play a physiological rôle might yield important results.
11. Further studies are desirable on the chemistry of casein, its amino-acid composition and the supplementary relations of casein to other heat coagulable proteins of milk.
12. A study of the nutritive qualities of whey and whey powder. This product, now manufactured in small amounts, seems to possess, when taken in the right amounts, a mild regulatory action on the intestinal tract which may make it desirable to recommend its wider use in nutrition.

ECONOMIC ASPECTS OF MILK

Milk and the dairy industry are inseparably linked to the nation's health and the normal growth and development of

its people. Scientific studies have shown that the food people eat, especially during the periods of rapid growth, in early childhood, has a lasting effect on the size of the entire race. President Hoover, when addressing The World's Dairy Congress in 1923 as Secretary of the Department of Commerce, said: "The exhaustive researches of nutritional science during the last two decades have, by the demonstration of the imperative need of dairy products for the special growth and development of children, raised this industry to one of the deepest national and community concern, for, as I have said, it is not alone the well-being of our people, but it is the very growth and the virility of our race to which you contribute."

Consumption of Fluid Milk and Cream

According to the latest figures available, the per-capita consumption of fluid milk in 1926 in the United States was 55.3 gallons per year, or slightly more than one pint per day. In 1926, the most recent year for which figures are available, four European countries exceeded the United States in the per-capita consumption of milk. These were Finland, with a consumption of 83.9 gallons; Switzerland, 70.4 gallons; Sweden, 69.7 gallons; and Norway, 56.0 gallons.

Nutrition experts state that for proper nutrition and health a normal growing child should receive a quart of milk daily during the years of rapid growth, and that each adult should consume at least a quart of milk or its equivalent in butter, cheese and ice-cream.

Surveys have shown that the average child is getting considerably less than a quart of milk a day. On the average farm more milk is consumed per capita than in cities, though this is not true in certain specific localities. The increase in the per-capita consumption of milk for the United States as a whole has been a gradual one. In 1921 the yearly per-capita consumption was 49 gallons, as compared with 55.3 gallons in 1926.

Doctor Sherman of Columbia University, after extensive experiments, concluded that a child should receive a quart of milk per day to insure the optimum storage of calcium and phosphorus and the best development of bones and teeth. He also said that the calcium in milk is superior to the calcium in vegetables as a source of that element for growing children.

Production in the United States is ample to care for future increases in consumption of fluid milk. If the per-capita consumption should increase as much as 15 per cent, it would take only 55 per cent of the present total production. Such an increase in consumption of fluid milk would mean that it would be necessary to divert a part of the milk supply that now is used for manufacturing purposes into fluid-milk markets. In June of this year the average price received at the farm for milk to be consumed as fluid milk, was $2.70 per hundredweight, as compared to $1.60 for milk sold to be manufactured into butter, cheese, and other products. If children, young people, and adults were consuming the quantity of milk required for proper nutrition and health, the diversion of this extra milk from butter, cheese, and so on, to fluid-milk uses, could be accomplished very readily.

Consumption of Other Milk Products

The value of condensed and evaporated milk in place of fluid milk was fully demonstrated during and immediately after the World War. In 1919 the equivalent of more than 2,000,000,000 pounds of milk was exported to Europe in either condensed, evaporated, or dried form.

Until recently, condensed, evaporated, and dried milk were consumed principally in sections where dairying had not been developed, or where geographic or climatic conditions made dairying impossible or unprofitable. In more recent years, these products have been sold in increasing amounts in home markets.

Physicians and dietitians have found evaporated and dried milk to be valuable in formulas for infant feeding. The use of these products in home cooking has increased also. Bakers and candy makers are using dried skim-milk in their products, and ice-cream manufacturers use dried skim-milk as well as plain evaporated milk and sweet-cream unsalted butter.

Nearly 47 per cent of the milk produced in the United States is used as fluid milk or cream. The per-capita consumption of milk in 1926 was 55.3 gallons; butter, 17.82 pounds; cheese, 4.36 pounds; condensed and evaporated milk, 14.32 pounds; and ice-cream, 2.77 gallons. In 1928 our net imports of butter and cheese were 761,279 pounds of butter and 77,833,325 pounds of cheese. In the same year our exports of sweetened and unsweetened condensed milk exceeded our imports by 112,804,852 pounds, and our exports of

dried milk exceeded our imports by 1,156,626 pounds. For the past few years the United States has been on an import basis.

Production of Milk

The amount of milk estimated to have been produced in the United States in 1926 was 120,766,000,000 pounds. Our principal milk-producing area extends from the New England and North Atlantic States in the East to Minnesota and the northern states of the Mississippi Valley on the West. Also in sections of the States of California, Oregon, and Washington dairying is carried on extensively.

Formerly, intensive dairying was practiced only close to large centers of population which required large quantities of milk for consumption as fluid milk. However, the geographic trend of dairying in the last few years has been toward the better soils of the Corn Belt and extending northwest to Wisconsin, Minnesota, and the Dakotas.

Conditions which are favorable to dairying are: Climate and soil suitable for growing corn for silage and legumes, especially alfalfa; fields of a size and contour suitable for power farming; farms close enough to centers of population so that they will be convenient to good markets, low-priced, efficient labor; and good pastures with plenty of rainfall.

The United States Department of Agriculture and the various State experiment stations have carried on enormous amounts of research work to reduce the cost of production through the breeding, selection, management, and feeding of dairy cattle. These studies have shown that there is a direct relation between the production per cow and income, and that the dairyman who uses modern methods in the elimination of the low-producing cows in his herd has the highest income.

Dairy Herd-Improvement Associations provide a very effective means for discovering low-producing cows. On January 1, 1930, there were 1,143 Dairy Herd-Improvement Associations in the United States. In these associations there were 507,549 cows on test. This number of cows was 2.3 per cent of the total of 22,499,000 cows in the United States as estimated by the U. S. Bureau of Agricultural Economics. In 1928 the average annual production of the cows in these associations was 7,464 pounds of milk, or 295 pounds of butter-fat, which was 60 per cent greater than the average production for all the milk cows in the United States.

The rapid growth of dairying in the Corn Belt in the last few years promises to continue. There are good reasons why dairying should increase in this section. Corn and alfalfa grow there very well. Sweet-clover fits into the cropping system. Power farming is entirely practical for raising crops. The region is far enough away from the industrial centers for labor to be obtained economically, yet close enough to provide markets for milk or its products.

Grain farms, especially the wheat-growing sections in the Red River Valley, are beginning to show signs of soil exhaustion. This condition is necessitating a change in the cropping system and the inclusion of the growing of cattle, either beef or dairy.

For many years state and Federal agencies have been making studies and investigations for the purpose of increasing efficiency in the production of milk, and there is no question but that milk can be produced at a lower cost by using the best known methods. This would mean that fewer cows would be required for producing the nation's milk supply.

Marketing

The majority of the market milk produced in the United States is sold in individual transactions between the producer and the processor or distributor. A portion is sold and delivered by the producer direct to the consumer. The rest is sold by what are known as fluid-milk marketing associations, which are cooperative organizations of producers. In 1928 these associations marketed about two-fifths of all the milk sold in the United States, a fraction valued at more than $325,000,000.

The period of greatest growth of these associations began during the World War. In general, the associations are of two types, depending on the kind of service rendered. One is the bargaining type, and the other is the operating or marketing type. The operating or marketing association has in addition to the bargaining function, facilities for the physical handling of the milk. Some associations of the operating type have receiving stations in the country, where the milk is received, cooled, and shipped to dealers in the cities. Such stations may have facilities for manufacturing surplus milk into various dairy products.

Adjusting the production of milk to the consumptive demands is one of the most difficult problems connected with the marketing of milk and various buying plans have been worked out for the

purpose of equalizing production throughout the year as far as is possible. Under the so-called "basic surplus" plan each producer is assigned a definite volume of production and for all milk produced in excess of this basic volume he receives a surplus or lower price. Each producer's basic quantity is usually determined by his average production during the previous October, November and December, the period of the year when the supply and demand for market milk most nearly balances. If a producer produces say an average of 3,000 pounds for these three months, then 3,000 pounds represents the base for this producer for the year, and he will receive market milk prices for milk delivered each month up to his basic 3,000 pounds. For any milk over 3,000 pounds, he will receive a less price according to a schedule worked out in the plan. Modifications of the plan to suit local conditions have been adopted by associations in other states.

The "Contract Plan" is a modification of the basic surplus plan designed to equalize the supply of milk throughout the year. Under this plan as used by the Connecticut Milk Producers' Association, the producer upon signing the contract previous to March 31 of any year states the quantity of milk he proposes to deliver daily for the next 12 months, beginning April 1. The producer is then penalized for production in excess of the amount specified or for shipping a less amount than that specified. The money collected from penalties does not go to the distributor, but is pooled by the producers and prorated among producers in such a way that it is equivalent to a bonus received by the producers having even production.

In some cities, the producer or association receives one price for milk used as fluid milk and a lower price for any milk which has to be made up into by-products. Many cities and sections of the country consider the butter-fat content in paying for fluid milk. Milk testing 3.5 or 4.0 per cent of butter-fat may be taken as the base, with a differential used for figuring premiums to be paid for milk testing higher than the base or for cuts in the price for milk testing below the base. Also, in some sections premiums are paid to producers for maintaining certain conditions of sanitation in relation to their milk production.

Transportation, Processing, and Delivery

The rapid growth of cities and the increases in the per-capita consumption of milk have had the effect of enlarging the milk-

sheds from which many of the cities receive their milk. Improvement in motor trucks and roads, and the introduction of tank trucks and tank cars, with modern means of insulation and refrigeration, have made it possible to extend the milk-producing areas.

The adoption of tank trucks and tank cars has stimulated the establishment of country receiving stations. In April, 1928, more than 75 per cent of Chicago's supply of milk was being shipped to that city by tank truck or tank car.

Tank trucks are used for routes covering 120 to 150 miles for the round trip, and tank cars made it entirely practical to extend a city's milk-shed beyond the 300- to 500-mile zone.

In Chicago, in 1925–26, it took approximately 51 cents of the consumer's dollar to pay for hauling the milk into the city, processing, bottling, and delivering it to the consumer. Forty-five cents of the consumer's dollar was received by the milk producer, and the balance, less than 4 cents, was net profit to the final distributor. Data tabulated by the Bureau of Dairy Industry of the United States Department of Agriculture in 1928 showed that the f.o.b. price of milk in different cities ranged from 37.0 per cent of the retail price of milk (in Denver, Colo.) to 64.1 per cent (in Richmond, Va.).

A study made in Chicago in 1926 showed that the price received from the ultimate consumer for a quart of market milk averaged 12.9 cents. The farmer received 5.3 cents for this milk, leaving a gross margin of 7.5 cents per quart. Purchasing, receiving, and processing cost 2.2 cents per quart. It took 4.6 cents to sell and deliver the quart. General and administrative expenses amounted to 0.3 of a cent, and net income was not quite 0.5 of a cent per quart.

The grocery or general store has a limited function in supplying milk in most places. "Very few stores," according to Kelly and Clement, "will care to provide refrigeration and attend to the selling of the milk for less than 2 cents per quart. Therefore, the price that the consumer must pay at the store is usually as high as that delivered at his own door, and in special instances the price at the store is higher, even though the consumer comes to the store for the milk."

Sanitary Quality of Milk and Cream

The dairy industry could add millions of dollars to its annual receipts if only milk of the finest quality was produced. Ten or

fifteen years ago this situation was accepted as inevitable, and it was difficult in some places to deliver sweet milk of good flavor to the market. As a result of years of constant work by agricultural and public health agencies, our farms and milk plants and their products are on a much higher plane of sanitation. This improvement has been brought about in a number of ways. For example, the United States Department of Agriculture has for more than 30 years been studying the question of dairy sanitation and methods of supplying the consumer with adequate and wholesome milk supplies. The state colleges of agriculture and agricultural experiment stations, State departments of agriculture, and other agencies, have been working effectively along this same line.

The California State Department of Agriculture has done one of the most effective pieces of dairy sanitation work. The State Department of Agriculture, because of its close touch with producers and manufacturers of dairy products, has an unusual opportunity to study methods of milk production and to devise practical and efficient methods for sanitary control. California is cited because it provides one of the best working examples of an economical state-wide program for the protection of the public health, improvement of the product, and the instruction of the dairy industry in the best known methods for the economical and sanitary production and processing of dairy products.

The United States Department of Agriculture and the various state agricultural colleges have the research and extension facilities and personnel not only to study questions of quality improvement, but to disseminate information on the subject among producers and manufacturers of the nation. The Department has outlined a program of quality improvement which can be, and is being, promoted by the state extension services in their work with adults and the boys and girls of the 4-H clubs. A number of States have already become interested in this program and are taking active steps to put it into effect. In 1929, through the cooperative extension work and the general distribution of information in printed and other forms, 78,552 farms improved their practice in the production and care of milk to make their product more sanitary. A number of other agricultural agencies and trade organizations have contributed to the raising of the general level of the quality of milk.

The modern trend of the dairy industry, in its steps to reduce losses through improperly produced milk and cream, and to insure

the consumer of an abundant supply of wholesome milk, is illustrated by some of the work that is being done by trade organizations. In 1929, 7 dairy organizations which were conducting quality-control work on market milk and cream were studied by the United States Bureau of Dairy Industry. Five of these were producers' organizations and the other 2 were dairy councils. This quality-control work included routine inspection of dairy farm and instruction of dairymen in methods of producing milk of better quality. It also involved laboratory tests to determine the quality of the milk delivered by individual farmers. In one of the producers' associations 69 field men were employed for farm and country work, and in addition to this the organization employed seven veterinarians and 16 laboratory workers. The cost of the quality-control work done by dairy organizations ranges from $6,000 to more than $250,000 per year per organization. Premiums ranging from 5 cents to 58 cents per 100 pounds have been paid for high-quality milk, and deductions ranging from 15 cents to 25 cents per 100 pounds have been made for lower quality.

Aside from agricultural agencies, health organizations, both official and semi-official, have done a vast amount of work in improving the milk supplies. Among the bodies which have worked on milk control are the United States Public Health Service; state, city, and county boards of health; the International Association of Dairy and Milk Inspectors; the American Public Health Association; the American Child Health Association; American Association of Medical Milk Commissions; and other similar agencies.

Reports gathered from city health departments in 1929 give tangible evidence of the improvement of the milk supplies.

The eradication program relative to bovine tuberculosis has a tremendous bearing on the economy of milk production and live stock raising as well as upon the public health. Systematic work along this line began only about ten years ago and far-reaching results have already been obtained. Three States, namely Michigan, Maine, and North Carolina, have been declared free areas by virtue of the fact that this disease has been practically eliminated from these areas under state and Federal supervision.

The abortion disease of cattle is the cause of great losses to the dairy industry, and it may have a significance in relation to the public health where raw milk is consumed. Abortion, in dairy cattle as well as in other live stock, has been found to be closely associated with undulant fever in man. Elimination of the cows

infected with this disease from the herd, through the test that has been worked out for this purpose, will remove this source of danger to the human family. It has been found that pasteurization will safeguard the milk supply from this disease. Legislation has been set up in 12 of the 48 states, in efforts to control this disease in dairy cattle.

STATEMENTS AND RECOMMENDATIONS

1. The consumption of fluid milk in the United States is too low for proper and economical human nutrition. We are far below the optimum daily consumption of milk for the normal child. Every educational facility should be used to acquaint both adults and children with the desirability of consuming milk and dairy products in adequate amounts. Health agencies both official and voluntary, should more actively encourage greater use of high-quality milk as a nutritional and health protective program.
2. The present production of milk in the United States is ample to provide sufficiently for the optimum consumption of fluid milk on the basis of the present population. A large proportion of our properly supervised market-milk supply is of such quality that it can be recommended for human consumption.
3. Many dairy products and by-products, other than milk, are available in quantity and quality suitable for wider inclusion in the American diet. Some of the whole-milk products may be used in place of whole milk under certain conditions.
4. The prices of milk and other dairy products are reasonable, considering their exceptional food value and cost of production in comparison with other foodstuffs which make comparable demands as to care, expense, and service in production and merchandising. In order that milk of high quality shall be available on an equitable basis to consumers generally the price of milk to the producer should be based, in a general way, upon the market price of butterfat, plus a sufficient additional amount to cover the additional costs necessary to produce and deliver milk that is high in quality.
5. Educational programs for raising the general level of quality of milk should be more extensively carried on through agricultural agencies thoroughly conversant with proper dairy practice and by the dairy industry itself. Such agencies are in intimate contact with every branch of the dairy industry. Unbalanced programs of dairy sanitation lead to undue costs in producing and processing milk. On the

other hand, practical quality-improvement work not only serves to protect health and welfare, but is a direct aid to the dairy industry through the elimination of financial losses and the widening of markets.

6. The future fluid-milk supply may come from greater distances from the point of consumption. Cheaper land, labor, and foods are usually available in sections away from large industrial centers. Local production should be encouraged to meet local demands; but where this is impossible, arrangements should be made for the proper shipment of high-quality milk and cream from a distance. To meet such a need, dairy manufacturing plants in strategic locations should be equipped to receive, cool, and ship milk and cream in a sanitary manner. Intensive sanitation work should be done with farmers delivering milk to processing plants. In this way, not only will the total supply of all dairy products be improved in quality, but larger quantities of milk of suitable quality will be available for shipment to city markets. The extension of country milk-receiving stations where milk is received, cooled, and shipped will expand milk-sheds, especially in the South and other sections where cooling on the farm is difficult to accomplish.
7. Every aid should be given to stimulate more economical and efficient milk production. This should expand research and extension along such lines as breeding, feeding, and management of dairy cattle; disease, parasite, and insect control in dairy herds; improvement of pastures and the raising, harvesting, and storing of crops, notably alfalfa, which are especially adapted to dairy farming.
8. Greater attention should be given to methods of transportation, terminal facilities, and warehousing of dairy products for the elimination of waste and improvement of quality.
9. It is essential that milk production be better adjusted to consumption throughout the year, to prevent the seasonal surpluses which tend to disorganize markets. Extension of a rational surplus plan of milk buying will do much to remedy this condition.
10. There should be a more widespread and uniform system of buying milk on the basis of butterfat content and sanitary quality. Payment for additional butterfat over the basic varies from 30 cents to $1.09 per pound in market-milk centers. In many cases at present the differential is far too low to warrant the additional cost of producing additional fat, while in others the financial penalty is too severe for milk lower in fat. Clean milk of low bacterial count costs more to produce and is of greater value to plant operators and consumers. As yet the additional payment for high quality is not widely made. An extension of this

system will result in rapid improvement of quality generally.

11. It is possible to reduce the cost of processing, bottling, and delivering milk. Studies have shown that many milk plants can make decided improvement in plant arrangement for efficiency, better utilization of labor, and the curtailment of material losses, such as those represented by spilled or wasted milk, broken milk bottles, poorly utilized steam, power and refrigeration.
12. The production and processing of milk usually is more sanitary and more economical in those plants which handle sufficient volumes of milk to enable them to have ample equipment of the best machinery and skilled technicians and labor. Such a plant must use the best methods, and operate at or near capacity. Furthermore, the centralization of the milk industry makes it easier to carry on the work of inspection and control.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

Among certain peoples infants and children have been reared without a milk supply after the weaning period. Many such children tend to suffer for a few years because the adult type of diet is not suitable for the young child. Long breast feeding is the custom in such places and there is a far greater health hazard to the child after weaning if cow's milk is not provided. In a country such as the United States where it is economically and agriculturally desirable to produce milk in abundance, it is a sound policy from the physiological point of view to include a liberal amount of milk in every child's diet. Therefore, an adequate supply of safe, good-quality milk should be available for all children. The best information available indicates that approximately a quart of milk, or its equivalent in other dairy products is desirable daily for the average growing child; but the average child receives considerably less than this amount.

Further research should be conducted to add to the existing knowledge of the nutritional value of milk and milk products. A number of researches in this field are suggested in the report of the Sub-committee on the Nutritional Aspects of Milk.

There is ample evidence that milk is an important factor in the transmission of certain communicable diseases unless it is properly produced, processed and distributed. A study of the reported outbreaks of communicable diseases attributable to milk in the United States indicates that the largest number occur in the smaller

communities in many of which the milk supply is not properly supervised and in which the percentage of milk pasteurized is small.

From a study of these outbreaks attributed to dairy products, it appears that improperly supervised fluid milk has been the most frequent offender in the transmission of disease, and that ice cream, cheese and butter are minor offenders. The latter will, in the future, probably become even less significant in this respect. No evidences were found to indicate that milk powder, condensed milk, or evaporated milk are significant communicable disease vectors.

The investigations of this committee show that there is need for further improvement in the public health and quality supervision of the milk supply of this country.

The committee believes that the supervision of milk, cream and other dairy products is of vital public health concern and economic importance, and should receive the coordinated attention of all state and local agencies, including public health authorities, agricultural departments, agricultural, educational and extension organizations within the State or community.

Laws or regulations for the supervision of milk supplies, whether local, State or Federal, should incorporate insofar as practicable uniform requirements at least the equivalent of those contained in a milk ordinance to be recommended by the United States Public Health Service and the Bureau of Dairy Industry of the United States Department of Agriculture. It is fundamental that all milk supplies should be surveyed and rated as frequently as practicable.

Inasmuch as the laws and regulations relating to the public health supervision of milk supplies deal only with measures which are designed primarily to protect the public health, they should, when practicable, be made the function of health authorities, local, state, and federal. The public health supervision of municipal milk supplies should obviously be the function of governmental departments primarily dedicated to the public health point of view and technically trained in the recognition of all public health aspects of the problem.

In the absence of local milk control, the State must assume this responsibility.

Health authorities should recommend to American milk consumers that the general market milk be pasteurized before it is

consumed, either in a properly supervised pasteurization plant or at home.

Milk should be bought and sold on a quality basis in order to reward and stimulate good quality.

In order that the supervision of milk and milk products may become general, and in order to educate the people as to the importance of adequate milk consumption, the Federal Government should prepare and institute a coordinated program of education and supervision and the States which have not already done so are urged to develop and put into operation a program coordinated with the Federal program.

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